

CHUSKA ENERGY CO., BLACK ROCK #12

7-40N-29E NW SW #875

COUNTY APACHE AREA BLACK ROCK FIELD LEASE NO. NOG 8702-1116

WELL NAME Now Hatten SW
CHUSKA ENERGY CO., BLACK ROCK #12

LOCATION NW SW SEC 7 TWP 40N RANGE 29E FOOTAGE 1527' FSL & 1165' FWL
ELEV 5679' GR 5692' KB SPUD DATE 6/30/93 STATUS GAS TOTAL
COMP. DATE 8/17/93 DEPTH 5230'

CONTRACTOR AZTEC DRILLING CO.

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY <u>X</u>
<u>8 5/8"</u>	<u>514'</u>	<u>360sx</u>		DRILLED BY CABLE TOOL
<u>4 1/2"</u>	<u>5246'</u>	<u>1480sx</u>	<u>(TWO STAGE)</u>	PRODUCTIVE RESERVOIR <u>PARADOX FM</u>
				INITIAL PRODUCTION <u>2486 MCFD (TEST)</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
MORRISON FM	SURF			(TOPS REPORTED BY OPERATOR)
CHINLE FM	895'			
DECHELLE SS	2027'			
ORGAN ROCK SH	2385'			
HERMOSA	3719'			
UPPER ISMAY	4299'			
LOWER ISMAY	4363'			
AKAH	4586'			
MOLAS FM	5063'			
MISSISSIPPIAN	5136'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
DLL, ML, FDC/CNL, CBL/	SELECTED BETWEEN	SAME	SAMPLE DESCRP.
CCL/GR	4106' to 4930'		SAMPLE NO.
			CORE ANALYSIS
			DSTs

REMARKS PERMIT EXTENDED **PERMIT RENEWED JULY 1993)**

APP. TO PLUG
PLUGGING REP.
COMP. REPORT YES

WATER WELL ACCEPTED BY

BOND CO. VALLEY NATIONAL BANK, PHOENIX

BOND NO. C.D. #2578904

BOND AMT. \$ 25,000

CANCELLED

DATE 12/10/89

ORGANIZATION REPORT YES

FILING RECEIPT 2924

LOC. PLAT ✓

WELL BOOK ✓

PLAT BOOK ✓

API NO. 02-001-20294

DATE ISSUED 5/14/90

DEDICATION SW QTR

PERMIT NUMBER 875

(over)

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG									
DESIGNATE TYPE OF COMPLETION:									
New Well <input checked="" type="checkbox"/>	Work-Over <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same Reservoir <input type="checkbox"/>	Different Reservoir <input type="checkbox"/>	Oil <input checked="" type="checkbox"/>	Gas <input type="checkbox"/>	Dry <input type="checkbox"/>	
DESCRIPTION OF WELL AND LEASE									
Operator <i>Chuska Energy Company</i>					Address <i>3315 Bloomfield Highway, Farmington, NM 87401</i>				
Federal, State or Indian Lease Number or name of lessor if free lease <i>8702-1116</i>					Well Number <i>12</i>		Field & Reservoir <i>Black Rock Field</i>		
Location <i>1527' FSL & 1165' FWL</i>					County <i>Apache County, AZ</i>				
Sec. TWP-Range or Block & Survey <i>Section 7-T40N-R29E</i>									
Date spudded <i>6-30-93</i>		Date total depth reached <i>7-14-93</i>		Date completed, ready to produce <i>8-17-93</i>		Elevation (IDE, RKB, RT or Gr.) <i>5679 GR</i> feet		Elevation of casing hd. flange <i>5692</i> feet	
Total depth <i>5230'</i>		P.B.T.D. <i>N/A</i>		Single, dual or triple completion? <i>Single</i>		If this is a dual or triple completion, furnish separate report for each completion.			
Producing interval (s) for this completion <i>Pinkerton Trail</i>					Rotary tools used (interval) <i>Yes</i>		Cable tools used (interval) <i>No</i>		
<i>Hermosa, Ismay, Desert Crk, Akah, Barker Crk,</i>					Was this well directionally drilled? <i>No</i>		Was directional survey made? <i>Yes</i>		Date filed <i>9/10/93</i>
Type of electrical or other logs run (check logs filed with the commission) <i>DLL, ML, FDC/CNL, CBL/CCL/GR</i>					Date filed <i>9/10/93</i>				
CASING RECORD									
Casing (report all strings set in well — conductor, surface, intermediate, producing, etc.)									
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled			
<i>Surface</i>	<i>12 1/4"</i>	<i>8 5/8"</i>	<i>24# J-55, ST&C 514</i>	<i>5245.92</i>	<i>360 sx Class 'B' CaCl2</i>	<i>SEE ATTACHMENT</i>			
<i>Production</i>	<i>7 7/8"</i>	<i>4 1/2"</i>	<i>11.6# J-55, LT&C</i>	<i>5245.92</i>	<i>SEE ATTACHMENT</i>				
<i>DVT @ 3500'</i>									
TUBING RECORD					LINER RECORD				
Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft)		
<i>2 3/8 in.</i>	<i>4947.04 ft.</i>	<i>3993.65 ft.</i>	<i>R-13" in.</i>						
PERFORATION RECORD					ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD				
Number per ft.	Size & type	Depth Interval			Am't. & kind of material used		Depth Interval		
<i>SEE ATTACHMENT</i>									
INITIAL PRODUCTION									
Date of first production <i>8-17-93</i>		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump.) <i>Flowing Gas well. Note: Recovering load H2O during flow test</i>							
Date of test <i>8-7-93</i>	Hrs. tested <i>2</i>	Choke size <i>None</i>	Oil prod. during test <i>5.0</i> bbls.	Gas prod. during test <i>2486</i> MCF	Water prod. during test <i>56.0</i> bbls.	Oil gravity <i>38</i> *API (Corr)			
Tubing pressure <i>325 psig</i>	Casing pressure <i>-</i>	Cal'ated rate of Production per 24 hrs.	Oil <i>60</i> bbls.	Gas <i>2486</i> MCF	Water <i>677</i> bbls.	Gas-oil ratio <i>41435</i>			
Disposition of gas (state whether vented, used for fuel or sold): <i>Gas vented to atmosphere & flared during test. First gas sales, 8-17-93.</i>									
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Operations Manager</u> of the <u>Chuska Energy Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.									
Date <i>9-23-93</i>			Signature <i>[Signature]</i> <div style="text-align: center;">9/24/93</div>						
API 02-001-20294				SEP 27 1993					
Permit No. <i>875</i>				STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy					

DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION*
Morrison	Surface		
Chinle	895'		
DeChelly	2027'		
Organ Rock	2385'		
Hermosa	3719'		
Upper Ismay	4299'		
Hovenweep Sh	4358'		
Lower Ismay	4363'		
Gothic Shale	4437'		
Desert Crk	4449'		
Chimney Rock Sh	4580'		
Akah	4586'		
Barker Crk	4736'		
Pinkerton Tr	4860'		
Molsa	5063'		
Mississippian	5136'		
TP	5235'		

CONFIDENTIAL

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

Black Rock #12
Sec. 7-T40N-R29E
Apache Co., Arizona

875

Production Casing Cementing Record:

SEP 27 1993

Stage 1: (5234-3500)

Preflush: 20 bbls mud flush
Lead Slurry: 390 sx (705.9 ft3) Haliburton Lite Cmt +
1/4#/sx Flocele
Tail Slurry: 170 sx (204 ft3) Premium 'G' Cmt. + 5% Cal Seal
+.4% Halad 344
Returns: Circulated 75 sxs to surface
Plug Down: 8:10 AM, 7-15-93

Stage 2: (3500-Surface)

Preflush: 20 bbls water
Lead Slurry: 850 sx (1539 ft3) Haliburton Lite Cmt + 1/4#/sx
Flocele
Tail Slurry: 70 sx (83 ft3) Standard Neat 'B' Cement
Returns: Circulated 720 sxs to surface
Plug Down: 3:50 PM, 7-15-93

Black Rock #12
Sec. 7-T40N-R29E
Apache Co., Arizona

875

SEP 27 1993

Perforation Record: (7-30-93)

Zone	No. per ft./Size&Type	Depth Interval
Hermosa	2 SPF/0.45"Dia. HEG	4106-14'
L. Ismay	2 SPF/0.45"Dia. HEG	4415-18', 23-26'
Desert Creek	2 SPF/0.45"Dia. HEG	4526-28', 46-51'
Akah	2 SPF/0.45"Dia. HEG	4606-08', 34-41', 70-73', 4704-08'
U. Barker Crk	2 SPF/0.45"Dia. HEG	4750-70'
L. Barker Crk	2 SPF/0.45"Dia. HEG	4828-34', 43-47'
Pinkerton Trl	2 SPF/0.45"Dia. HEG	4922-30', 42-45', 76-80'

Acid Record: (7-31-93 through 8-6-93)

Zone	Am't & Description	Depth Interval
Hermosa	1600 gal 20% 9.2# HCl	4106-14'
Desert Crk & L. Ismay	2600 gal 20% 9.2# HCl	4415-4541'
Akah	900 gal 20% 9.2# HCl	4606-4708'
U. Barker Crk	2000 gal 20% 9.2# HCl	4750-70'
L. Barker Crk	2400 gal 20% 9.2# HCl	4828-34', 43-47'
Pinkerton Tr	600 gal. 20% 9.2# HCl	4976-80'
	450 gal. 20% 9.2# HCl	4942-45'
	1200 gal 20% 9.2# HCl	4922-30'

Comingled Flow Test: (All zones)

Date: 8-7-93
Hours Flow Test: 2 HRS
Rate: 2.486 MMCFD
28.0 BWPFR
2.50 BOPHR
Flowing Tubing Pressure: 325 psig
Choke: None (2 7/8 Flare Line)

STATE: ARIZONA
COUNTY: APACHE
API 02-001-20294
FIELD: BLACK ROCK
WELL CLASS: DG
OPR: HARKEN SOUTHWEST

REISSUE

40N-29E 7
SE NW SW
1527 FSL 1165 FWL
STATUS: GAS

Permit 875

12 BLACK ROCK

SPUD: 08/30/93 COMP: 08/07/93 ELEV: 5692 KB 5679 GR
TD: 5235 (07/18/93) FMTD: MISSISSIPPIAN
CONTR: AZTEC WELL SRVCG RIG # 301 (R) RIG SUB: 13 (VERTICAL)
PROJ DEPTH/FM: 5266 PARADOX

COMP 8/7/93, IPF 60 BCPD, 2486 MCFGPD, 677 BLW, GTY 38.0, GOR 41435, FTP 325.
PROD ZONE - PARADOX 4106-4980(GROSS). NO CORES OR DSTS. REISSUE TO CORRECT
API #, DATES, FMTD, TD, CSG, OPR, IP, PROD TEST, ADD LTD, TBG, LOG TYPES & TOPS. REPLACES
CARD ISSUED 5/6/94.

LOG DESCRIPTION: 10 MI W TEEC NOS POS, AZ: LAT: 3688461 LONG: 10927850;
WELL ID CHANGES: WELL # CHGD FROM 10. OPR CHGD FROM CHUSKA ENERGY API CHGD FROM
02-001-50034-0000. OPR CHGD FROM HARKEN EXPL.
CASING: 8 5/8 @ 514 W/360 SX, 4 1/2 @ 5230; TBG: 2 3/8 @ 4947;
LOG TYPES: CBND, CCL, CNL, DLL, FDC, GR, MCL;
LOG TOPS:
MORRISON (SURF) 5692 ORGAN ROCK 2385 3307
CHINLE 895 4797 HERMOSA 3719 1973
DE CHELLY 2027 3655 ISMAY U 4299 1393

(OVER)

COPYRIGHT 1996 PETROLEUM INFORMATION CORPORATION

DATE 05/20/96 CARD # 00001-F COR

STATE: ARIZONA
COUNTY: APACHE
API 02-001-20294
FIELD: BLACK ROCK
WELL CLASS: DG
OPR: HARKEN SOUTHWEST

REISSUE

40N-29E 7
SE NW SW
1527 FSL 1165 FWL
STATUS: GAS

12 BLACK ROCK

(CONTINUED)

ISMAY L	4363	1329	BARKER CREEK	4738	956
GOTHIC	4437	1255	PINKERTON TRAIL	4880	832
DESERT CREEK	4449	1243	MOLAS	5063	829
CHIMNEY ROCK	4580	1112	MISSISSIPPIAN	5136	556
AKAH	4586	1106			

TD 5235 457

SUBSEA MEASUREMENTS FROM KB:

DRILG COMMENTS: LOCAL CALL(LOG): HOVENWEEP 4358.

PROD TEST(S): PERF (HERMOSA) 4106-4114 W/2 PF, PERF (ISMAY L) 4415-4426 W/2 PF, GROSS, PERF
(DESERT CREEK) 4526-4551 W/2 PF, GROSS, PERF (AKAH) 4606-4708 W/2 PF, GROSS, PERF (BARKER
CREEK) 4730-4847 W/2 PF, GROSS, PERF (PINKERTON TRAIL) 4922-4980 W/2 PF, GROSS, 4415-4418,
4423-4426, 4526-4528, 4546-4551, 4606-4608, 4634-4641, 4670-4673, 4704-4708, 4750-4770, 4828-4834,
4843-4847, 4922-4930, 4942-4945, 4976-4980, ACID (4100-4114) W/1600 GALS, 20% HCL ACID (4415-4426)
W/2000 GALS, 20% HCL ACID (4526-4708) W/900 GALS, 20% HCL ACID (4750-4770) W/2000 GALS, 20% HCL
ACID (4828-4847) W/2400 GALS, 20% HCL ACID (4922-4980) W/2250 GALS, 20% HCL
PRODUCING INTERVAL: PERF (PARADOX)

(CONTINUED ON NEXT CARD)

DATE 05/20/96 CARD # 00001-F COR

STATE: ARIZONA
COUNTY: APACHE
API 02-001-20294
FIELD: BLACK ROCK
WELL CLASS: DG
OPR: HARKEN SOUTHWEST

REISSUE

40N-29E 7
SE NW SW
1527 FSL 1165 FWL
STATUS: GAS

12 BLACK ROCK

(CONTINUED)

4106-4980 W/2 PF GROSS, WELL PROD 73 BC, 19281 MCFG, 13 DAYS, AUG 1993; 25177 MCFG, 30 DAYS, SEPT
1993; 87 BC, 29985 MCFG, 91 BW, 31 DAYS, OCT 1993. WELL CUM AUG 1993-FEB 1996 1761 BC, 686763
MCFG, 8201 BW, IPF 80 BCPD, 2486 MCFG, 677 BLW.
OPER ADD: 2505 N HWY 360 STE 800, GRAND PRAIRIE, TX, 75050 PHONE (817) 695-4900;

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Harken Southwest Corporation

3. Address and Telephone No.
P.O. Box 612007 Dallas, Texas 75261-2007 (972)753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**NW/SW Section 7-40N-29E
1527' FSL & 1165' FWL**

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

NOG 8707-1142

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.

Black Rock #12

9. API Well No.

02-001-20294

10. Field and Pool, or Exploratory Area

Black Rock

11. County or Parish, State

Apache Co., AZ

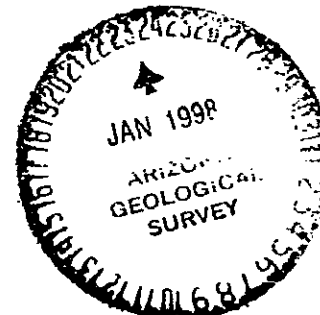
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Updated site Security Diagram
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Attached you will find the updated site security diagram, for the above referenced lease, as of January 1998.

CC: State of Arizona
Navajo Nation
BIA



14. I hereby certify that the foregoing is true and correct

Signed [Signature]
(This space for Federal or State office use)

Title **Production Administrator** Date **01/21/98**

Approved by
Conditions of approval, if any:

Title _____ Date _____

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

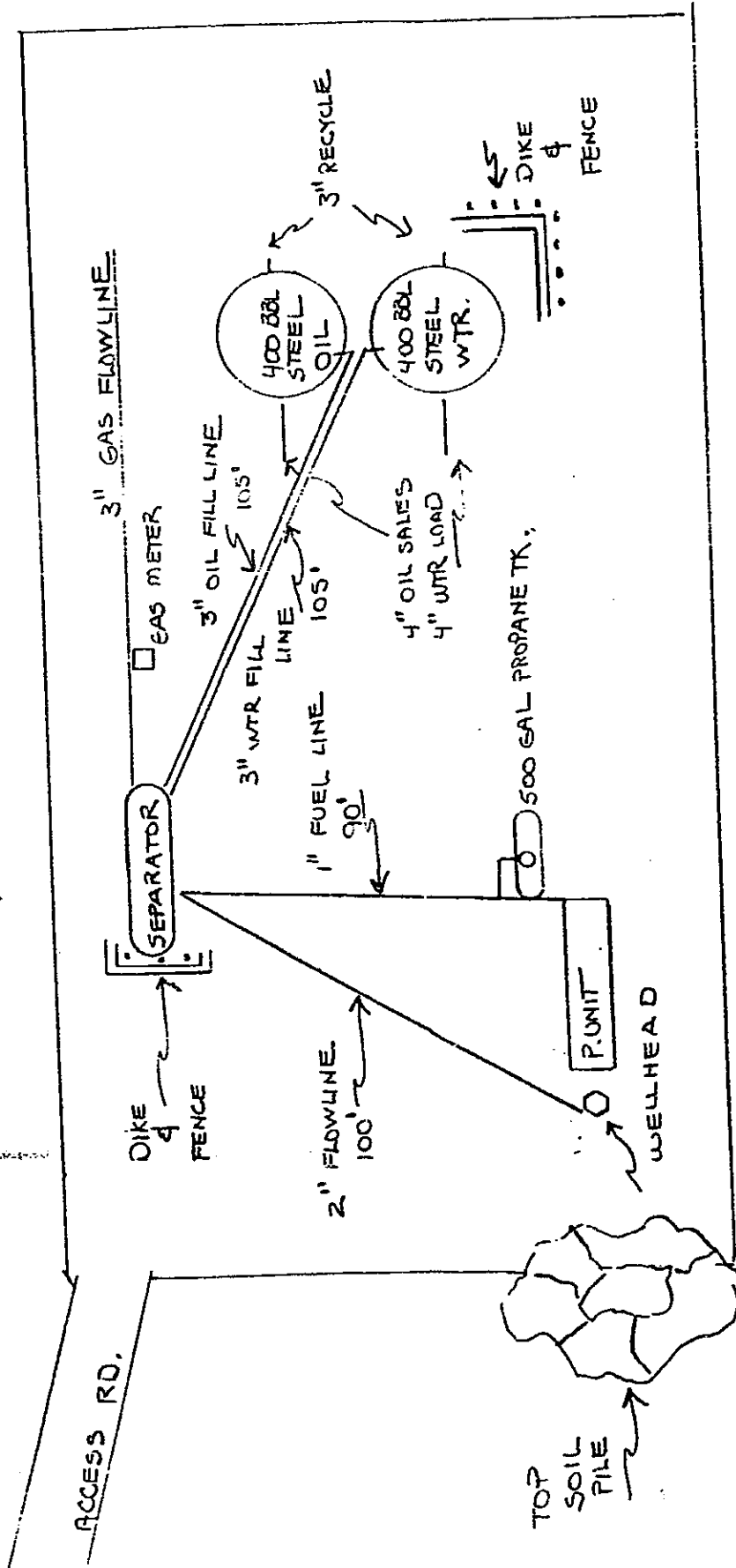
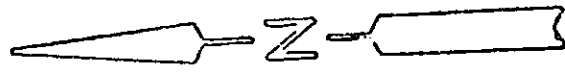
REVISED-SITE SECURITY DIAGRAM

HARKEN SOUTHWEST CORP.
BLACK ROCK #12
APACHE COUNTY, ARIZONA
NW/3W SEC. 7-T40N-R29E
N06 8707114Z
API 02-001-20294

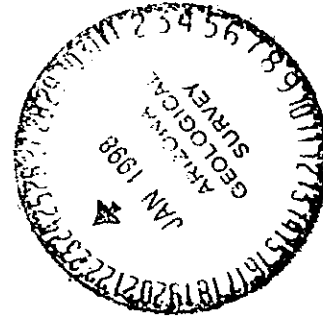
1-12-98

dhm

7/1/875



SEPARATOR - P & A INCORP S.N. # 4168 MODEL HLP-113-500
P. UNIT - NATIONAL S.N. # 13751 F-160-200-74"
ENGINE - ATAX 74"X8" S.N. # 65885
OIL TK - S.N. # 1875
WTR TK - S.N. # 1876



Dec-31-97 03:17P Harken Energy Corporation 977 753-6902

P.01

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Harken Southwest Corporation

3. Address and Telephone No.
P. O. Box 612007, Dallas, TX 75261-2007 (972) 753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NW/SW Section 7-40N-29E

5. Lease Designation and Serial No.
NOG 8707-1142

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.
Black Rock #12

9. API Well No.
02-001-20294

10. Field and Pool, or Exploratory Area
Black Rock

11. County or Parish, State

Apache Co., Arizona

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Return to Production</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Please be advised that Harken Southwest returned the subject well to production @5:00 p.m. on December 30, 1997.

CC: State of Arizona
Navajo Nation Minerals Dept
BIA - Gallup, NM

I hereby certify that the foregoing is true and correct.
Signature R. Montgomery Title Production Administrator Date 12/31/97

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any.

Title _____ Date _____

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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☐ Oil Well ☒ Gas Well ☐ Other

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Harken Southwest Corporation

3. Address and Telephone No.
P.O. Box 612007, Dallas, TX 75261-2007 (972) 753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NW/SW Section 7-40N-29E

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NOG 8707-1142

6. If Indian, Allottee or Tribe Name
Navajo

7. If Unit or CA, Agreement Designation
N/A (P/N 875)

8. Well Name and No.
Black Rock #12

9. API Well No.
02-001-20294

10. Field and Pool, or Exploratory Area
Black Rock

11. County or Parish, State
Apache, AZ

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

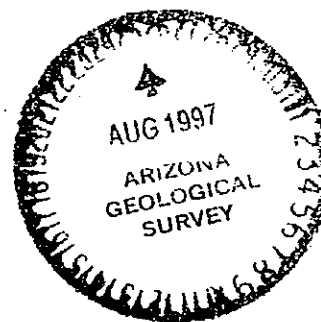
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<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Shut-In Status</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Attempts successfully establish commercial production rates on the subject wellbore have been unsuccessful. Therefore, the Black Rock #12 was shut-in on August 1, 1997, pending engineering evaluation to re-establish production.

CC: State of Arizona
Navajo Nation - Minerals Dept
BIA - Gallup, NM



14. I hereby certify that the foregoing is true and correct

Signed [Signature] Title Production Administrator Date 08/19/97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See instruction on Reverse Side

ARIZONA OIL AND GAS CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 8-7-93		Well Name Black Rock #12	
Company Chuska Energy Company				Connection		Permit No. 875	
Pool				Formation Barker Cnk, Pinkerton Trail, Hermosa, Desert Cnk, Ismay, Akah		Unit	
Completion Date 7-31 / 8-6-93		Total Depth 5230' KB		Plug Back TD N/A		Elevation 5679 GR	
Csg. Size 4 1/2	Wt. 11.6#	d J-55	Set At LT&C 5234'	Perforations: From SEE ATTACHMENT		Well No. 12	
Tbg. Size 2 3/8	Wt. 4.7#	d J-55	Set At 4947'	Perforations: From To		% - 1/4 Sec. Twp. Rge. 7-40N-29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Bradenhead G.G.				Packer Set At 3994'		County Apache	
Producing Thru Tbg		Reservoir Temp. °F 131 @ 4970'		Mean Annual Temp. °F 70° F		Baro. Pres. - P _a 12.1	
L	H	Gg. .712	% CO ₂ 4.04	% N ₂ 8.71	% He N/A	Prover -	Meter Run 4:026
Taps							

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Choke Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	4.026 x 2.0			180	24	64°	325	64°	N/A	N/A	2 hrs
1.	L10 static (5000#) = 4.24										
2.	L10 Diff. 100" = 4.9										
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24-Hour)	$\sqrt{h_w P_m}$	Extension Pressure P _m PSIA	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcfd
1.	842.12	67.85	197.80	1.008	1.185	1.014.0	1,700
2.							
3.				$\gamma = 1.$	$P_2 = 14.72$		
4.				$F_{H_2} = 1.$	14.65	= 1.0055	
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcft/bbl.
1.					A.P.I Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	
3.					Specific Gravity Flowing Fluid	
4.					Critical Pressure	p.s.i.a.
5.					Critical Temperature	R

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²
1.				
2.				
3.				
4.				
5.				

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{P_c^2}{P_c^2 - P_w^2}$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{P_c^2}{P_c^2 - P_w^2}$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$			

Absolute Open Flow		Mcfd @ 15.025	Angle of Slope °	Slope, n
Remarks:				

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Barry A. Wieland of the Chuska Energy Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date 9/24/93 Signature Barry A. Wieland

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
 Multipoint and One Point Back Pressure Tests for Gas Well
 Form No. 18 (File two copies)

SEP 27 1993

Software Solutions

P.O. Box 452
Blanco, N.M. 87412
(505) 632-2661
Owner - Robert C. Lippincott



CHUSKA ENERGY COMPANY
3315 BLOOMFIELD HWY
FARMINGTON, N.M. 87401

GAS CHROMATOGRAPH ANALYSIS

CUST/STATION #: 6730010350

CUST STAT NO :

CUST STAT NAME: BLACK ROCK #12

FIELD : ANETH

COUNTY :

STATE :

SAMPLING DATE : 08/18/93

SAMPLED BY : FERRARI GAS MEAS

PRESSURE : 95

FLOW TEMP : 50

PRESSURE BASE : 14.696 DRY

SOURCE : MTR.RUN

ANALYZED BY : B.L.

DATE OF ANALYSIS : 08/21/93

RUN NUMBER : 2001-105

COMPONENT	CURRENT MOLE %	GPM @ 14.696 D	PREVIOUS
OXYGEN	0.00	0.000	0.00
CO2	4.04	0.000	0.00
NITROGEN	8.71	0.000	0.00
METHANE	77.44	0.000	0.00
ETHANE	5.47	1.459	0.00
PROPANE	2.50	0.687	0.00
I-BUTANE	0.39	0.127	0.00
N-BUTANE	0.78	0.245	0.00
I-PENTANE	0.19	0.069	0.00
N-PENTANE	0.20	0.072	0.00
HEXANES	0.28	0.126	0.00
TOTAL	100.00	2.785	

SPECIFIC GRAVITY	0.7120	0.0000
GROSS BTU/CU. FT. @15.025 DRY	1033.2	0.0
GROSS BTU/CU. FT. @15.025 SAT	1015.7	0.0
GROSS BTU/CU. FT. @14.730 DRY	1012.9	0.0
GROSS BTU/CU. FT. @14.730 SAT	995.3	0.0
GROSS BTU/CU. FT. @14.696 DRY	1010.6	0.0
GROSS BTU/CU. FT. @14.696 SAT	993.0	0.0

REMARKS :

JUL 15 '93 08:50 CHUSKA FARMINGTON NM

P.2
602-628-5106

CONFIDENTIAL

BLACK ROCK #12
SEC. 7, T40N, R29E, APACHE COUNTY, ARIZONA

FORMATION	PROJECTED GEOLOGY	E-LOG TOPS	DRILLING BREAKS	PEAK GAS	BACK- GROUND GAS
MORRISON		SURFACE			
WINGATE		115'			
CHINLE	1,013'	895'			
DECHELLY	2,013'	2,027	4107'-4114'	340	4
ORGAN ROCK	2,385'	2,386	4415'-4417'	70	2
HERMOSA	3,710'	3,735	4422'-4426'	172	3
ISMAY	4,308'	4,299	4444'-4447'	54	12
LOWER ISMAY	4,369'	4,361	4523'-4526'	84	5
DESERT CREEK	4,467'	4,449	4543'-4551'	50	40
CHIMNEY ROCK	4,591'	4,580	4633'-4640'	100	2
AKAH	4,597'	4,586	4668'-4676'	108	6
BARKER CREEK	4,730'	4,736	4702'-4706'	130	9
PINKERTON TRAIL	4,856'	4,810	4749'-4766'	320	60
MOLAS	5,052'	5,063	4843'-4845'	116	7
MISSISSIPPIAN	5,136'	5,136	4920'-4927'	44	2
TD (5230)					

PRIVATE CONFIDENTIAL
CONFIDENTIAL

SUNDRY NOTICES AND REPORTS

1. Name of Operator Chuska Energy Company AZ OIL & GAS
CONSERVATION COMMISSION

2. OIL WELL ☐ GAS WELL ☐ OTHER ☐ (Specify) MAY 13 1991

3. Well Name Black Rock #12

Location 1527' FSL, 1165' FWL

Sec. 7 Twp. 40N Rge. 29E County Apache, Arizona.

4. Federal, State or Indian Lease Name, or lessor's name if fee lease HOG 8702-1116 Navajo Tribal

5. Field or Pool Name Black Rock Paradox

6. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO

SUBSEQUENT REPORT OF

TEST WATER SHUT OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <input type="checkbox"/>	ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Extend APD approval</u> <input checked="" type="checkbox"/>		(OTHER) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Owing to further evaluation of the prospect and reserves, spud of this well has been delayed. Chuska Energy therefore applies for a twelve month extension to the approved APD on this well.

Six month to 12/1/91

APPROVED

By Steven L. Rainey

Date 5-20-91
ARIZONA STATE OIL & GAS
CONSERVATION COMMISSION

8. I hereby certify that the foregoing is true and correct.

Signed Christopher S.W. Hill Title Operations Engineer Date 5-10-91

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports on Wells
File One Copy

Permit No. 00875

Form No. 25

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER			
APPLICATION TO DRILL <input checked="" type="checkbox"/>		RE-ENTER OLD WELL <input type="checkbox"/>	
NAME OF COMPANY OR OPERATOR			
Chuska Energy Company			
Address		City State	
P. O. Box 780, Farmington, New Mexico 87401			
Drilling Contractor			
To be Determined			
Address			
DESCRIPTION OF WELL AND LEASE			
Federal, State or Indian Lease Number, or if fee lease, name of lessor		Well number	
NOG 8702-1116 Navajo Tribal		Black Rock #12	
Nearest distance from proposed location to property or lease line:		Elevation (ground)	
1165' feet		5679' GR	
Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:		feet	
4060		feet	
Number of acres in lease:		Number of wells on lease, including this well, completed in or drilling to this reservoir:	
50,000		13	
If lease, purchased with one or more wells drilled, from whom purchased:		Name Address	
N/A			
Well location (give footage from section lines)		Section—township—range or block and survey	
1527' FSL x 1165' FWL		Sec. 7, T40N, R29E	
Field and reservoir (if wildcat, so state)		County	
Black Rock Paradox		Apache	
Distance in miles, and direction from nearest town or post office			
8 miles west/southwest of Teec Nos Pos, Arizona			
Proposed depth:		Rotary or cable tools	
5266'		Rotary	
Bond Status Pending		Organization Report	
Amount \$25,000		On file Or attached	
Approx. date work will start		Filing Fee of \$25.00	
7-15-90		Attached	
Remarks:			
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Operations Manager</u> of the <u>Chuska Energy Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.			
Signature <u>[Signature]</u>			
Date <u>5-7-90</u>			
Permit Number: _____		Approval Date: _____	
Approved By: _____			
Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.			

STATE OF ARIZONA

OIL & GAS CONSERVATION COMMISSION

Application to Drill or Re-enter

File Two Copies

Form No. 3

(Complete Reverse Side)

1. Operator shall outline the dedicated acreage for *both* oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO _____.
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____.
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description																
<div style="display: flex; justify-content: space-between;"> <div style="width: 55%;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td></tr> <tr><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td></tr> <tr><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td></tr> <tr><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td><td style="height: 50px;"></td></tr> </table> </div> <div style="width: 40%;"> <p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name _____</p> <p>Position _____</p> <p>Company _____</p> <p>Date _____</p> <p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p>Date Surveyed _____</p> <p>Registered Professional Engineer and/or Land Surveyor _____</p> <p>Certificate No. _____</p> </div> </div>																	

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type

FORM 3

AZ OIL & GAS
CONSERVATION COMMISSION
DIVISION OF OIL, GAS AND MINING

APR 30 1990

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK			15. Lease Designation and Serial No.	
1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			NOG 8702-1116	
b. Type of Well Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone <input checked="" type="checkbox"/>			2. If Indian, Allottee or Tribe Name Navajo Tribal	
2. Name of Operator Chuska Energy Company			3. Unit Agreement Name	
3. Address of Operator P. O. Box 780, Farmington, New Mexico 87499			4. Farm or Lease Name Black Rock	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1527' FSL x 1165' FWL At proposed prod. zone Same			5. Well No. #12	
14. Distance in miles and direction from nearest town or post office* 8 miles west/southwest of Teec Nos Pos, Arizona			10. Field and Pool, or Wildcat Black Rock/Paradox	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest dir. line, if any) 1165			11. 40, Sec., T., R., or S. and Survey or Area Sec. 7, T40N, R29E	
16. No. of acres in lease 50,000			12. County or Parian 13. State Apache Arizona	
17. Distance from proposed location to nearest well, drilling, completed, or applied for, on this lease, ft. 4060			17. No. of acres assigned to this well 160	
18. Proposed depth 5266			20. Rotary or cable tool Rotary	
21. Elevations (Show whether DF, RT, GR, etc.) 5679' GR			22. Approx. date work will start* 7-15-90	
23. PROPOSED CASING AND CEMENTING PROGRAM				
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4	8 5/8	24	500	426 cf
7 7/8	5 1/2	15.5	5266	928 cf

See attached drilling prognosis and 10 point plan.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signed: Donald C. Barnes Title: Operations Manager Date: 4-26-90

(This space for Federal or State office use)

APT NO. _____ Approval Date _____

Approved by: _____ Title: _____ Date: _____
Conditions of approval, if any: _____

*See Instructions On Reverse Side

1. Operator shall outline the dedicated acreage for *both* oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO _____.
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
6. If the answer to question four is "no," list all the owners and their respective interests below:

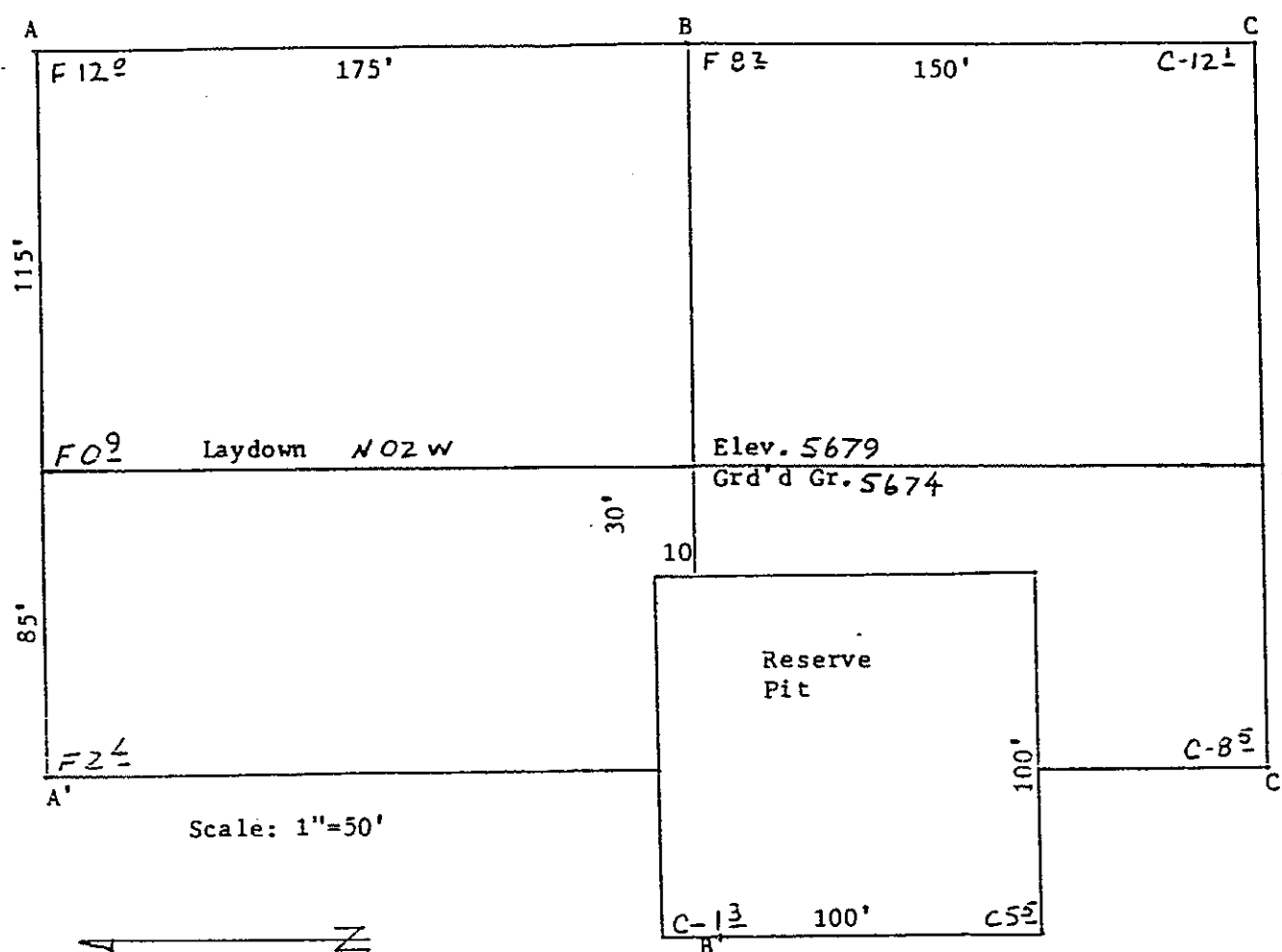
Owner	Land Description
<div style="display: flex; justify-content: space-between;"> <div style="width: 50%;"> </div> <div style="width: 45%;"> <p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name Roy A. Rush</p> <p>Position Surveyor</p> <p>Company Powers Elevation Co., Inc</p> <p>Date April 8, 1990</p> <p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my knowledge and belief.</p> <p style="text-align: center;"> </p> <p>Date Surveyed April 6, 1990</p> <p>Registered Professional Engineer and/or Land Surveyor</p> <p style="text-align: right;"> </p> <p>Certificate No. 19348</p> </div> </div>	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
8 5/8	24	K55 STC	0	500	500 - surf	370 sks	Class 'G'
5 1/2	15.5	K55 STC	0	5266	5266 - 3000	350 sks	GAS BLOCK
					3000 - surf	224 sks	65/35/6
						100 sks	Class 'G'

Chuska Energy Company
 Black Rock #12 1165fsl, 1527fsl
 Section 7, T40N, R29E
 Apache County, Arizona

MKS



A-A'	Vert.: 1"=30'	Horiz.: 1"=100'	C/L
5670'			
5660'			
B-B'			
5680'			
5670'			
C-C'			
5680'			
5670'			

Form 3160-3
(November 1983)
(formerly 9-331C)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT ON THIS DATE*
APR 30 1990
CONSERVATION COMMISSION

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal		
2. NAME OF OPERATOR Chuska Energy Company		7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR P. O. Box 780, Farmington, New Mexico 87499		8. FARM OR LEASE NAME Black Rock		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1527' FSL x 1165' FWL At proposed prod. zone Same		9. WELL NO. 12		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 8 miles west/southwest of Teec Nos Pos, Arizona		10. FIELD AND POOL, OR WILDCAT Black Rock/Paradox		
10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)	1165	16. NO. OF ACRES IN LEASE 50,000	17. NO. OF ACRES ASSIGNED TO THIS WELL 160	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	4060	19. PROPOSED DEPTH 5266	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5679' GR		22. APPROX. DATE WORK WILL START* 7-15-90		
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24	500	426 cf
7 7/8	5 1/2	15.5	5266	928 cf

See attached drilling prognosis and 10 point plan.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Donald S. Barnes TITLE Operations Manager DATE 4-26-90
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Black Rock No. 12
Section 7, Township 40N, Range 29E
1527' FSL, 1165' FWL
Apache County, Arizona

1. SURFACE FORMATION

Surface formation: Morrison.

2. ELEVATION

Surface elevation; 5679' GR, 5693' KB.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea</u> <u>Elevation</u>	
Surface	Morrison	+ 5679'	
1013'	Chinle	+ 4680'	
2013'	De Chelly	+ 3680'	water
2385'	Organ Rock	+ 3308'	
3723'	Hermosa	+ 1970'	gas
4317'	Ismay	+ 1376'	gas
4373'	Lower Ismay	+ 1320'	gas
4461'	Desert Creek	+ 1232'	gas
4599'	Akah	+ 1094'	gas/water
4751'	Barker Creek	+ 942'	gas
4873'	Pinkerton Trail	+ 820'	gas
5101'	Molas	+ 592'	
5166'	Mississippian	+ 527'	Gas/oil/water
5266'	TD (100' below top of Mississippian)	+ 427'	

4. PROPOSED CASING/CEMENTING PROGRAM

	<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Coupling</u>
Surface:	500	8 5/8	24.0 ppf	K-55	STC
Production:	5266	5 1/2	15.5 ppf	K-55	STC

Surface Cementing:

370 sks (426 cf), Class 'G' cement with 2% CaCl₂ and 1/4 #/sk celloflake. Weight - 15.6 ppg, yield 1.14 cf/sk. Slurry volume calculated at 100% excess over annular volume.

Production Cementing:

First Stage

TD to 3000' (stage collar @ 3000'). 350 sks Class 'G' GAS-BLOCK slurry system + .25 #/sk celloflake (15.8 ppg, 1.14 cf/sk). Total of 398 cf.

Circulate 4 hours between stages

Second Stage

3000' to surface. Lead with 224 sks Class 'G' 65/35 poz + 6% gel + .25 #/sk celloflake (12.7 ppg, 1.85 cf/sk), tail with 100 sks Class 'G' + 2% CaCl₂ (15.6 ppg, 1.15 cf/sk). Total of 530 cf.

Note: Exact slurry volumes for the production string will be adjusted based on the caliper log to be run prior to cementing.

5. BLOWOUT PREVENTER (See attached schematics)

As abnormal pressure is not anticipated, a 2000 psi BOP system will be sufficient for the drilling of this well. However, due to availability constraints, a 3000 psi system will be used, as per the attached Exhibits "A" and "B". Exhibit A diagrams a 10" x 900 Series double ram preventer, equipped with a set of pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required by the operator.

6. PROPOSED MUD PROGRAM

Surface to 3000'

Fresh water, gel/lime, & native solids. Weight 8.3 - 8.7 ppg, with gel/lime sweeps as necessary to clean hole.

3000' to Total Depth

Low solids - non dispersed polymer system. Weight 8.6 - 9.2 ppg. Sweep with gel/lime sweeps as hole conditions dictate. Fluid loss to be maintained at 15 cc or less. Fluid loss to be further reduced to 10 cc or less prior to drilling the Paradox formation.

7. AUXILIARY EQUIPMENT

- A. A kelly cock will be installed during drilling operations, with handle available on the rig floor.
- B. Floor (stabbing) valves will be available, on the rig floor at all times, with necessary subs to fit all drilling assemblies.
- C. Mud will be the circulating fluid. No abnormal formation pressures are expected.

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from TD to 3500'.

Drill stem testing will be as per well site geologist's recommendations, based on shows. A mud logging unit will be utilized during drilling operations from 3500' to TD.

9. ABNORMAL PRESSURES/GAS

Abnormal pressure is not anticipated. Monitoring of gas and hydrocarbon shows will be by well site mud logging unit. H₂S gas has been encountered in offset wells at concentrations averaging 1200 ppm. An H₂S detection and alarm system, with appropriate safety equipment, will be in place from 3500' to TD. An H₂S Safety representative will be on site for all DST's, coring operations, trip gas, and circulating bottoms up.

10. TIMING

It is estimated that the drilling and evaluation of this well will require 20 days. Anticipated spud date is 7-1-90.

EXHIBIT A

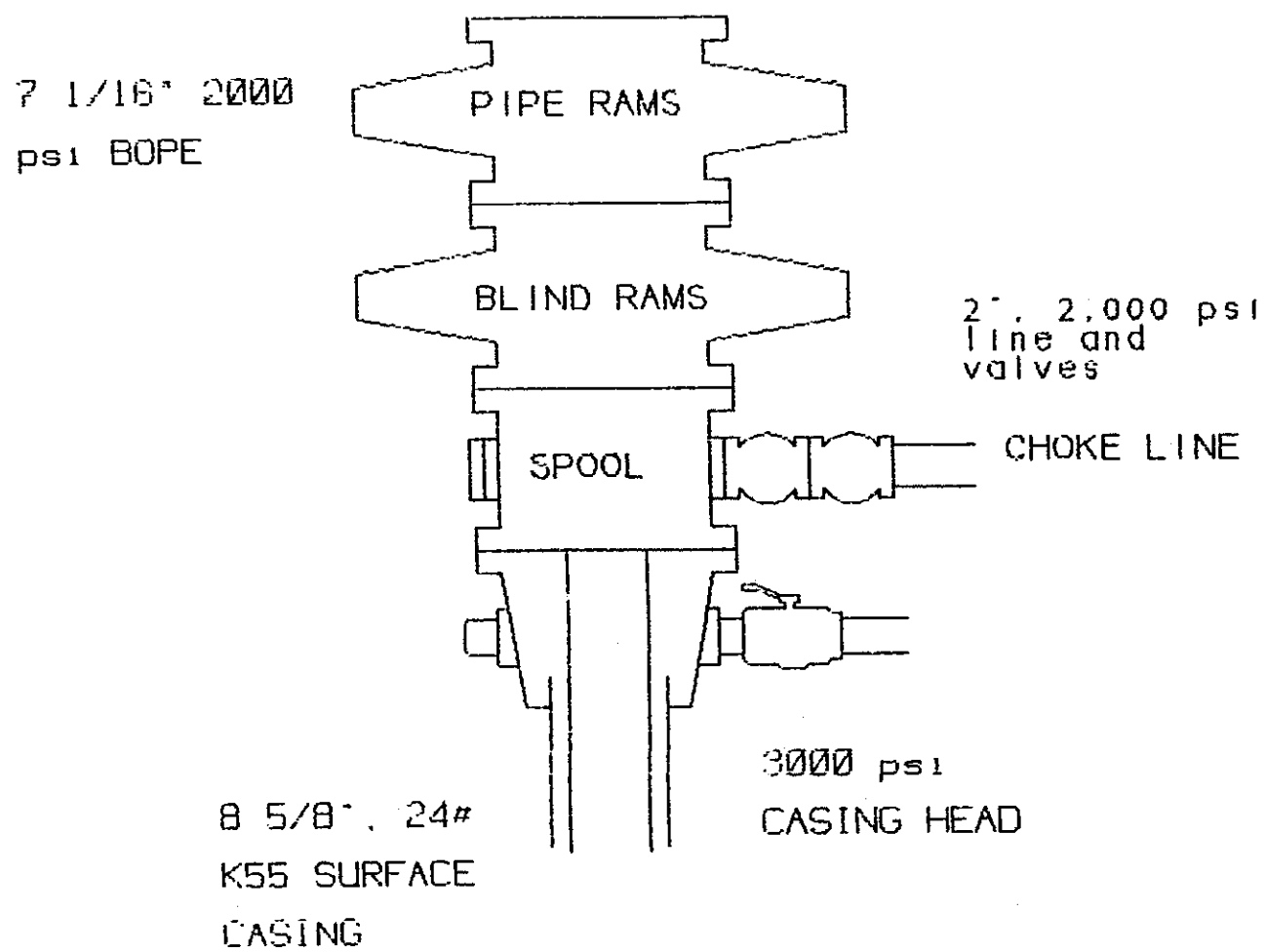


EXHIBIT B - CHOKE MANIFOLD

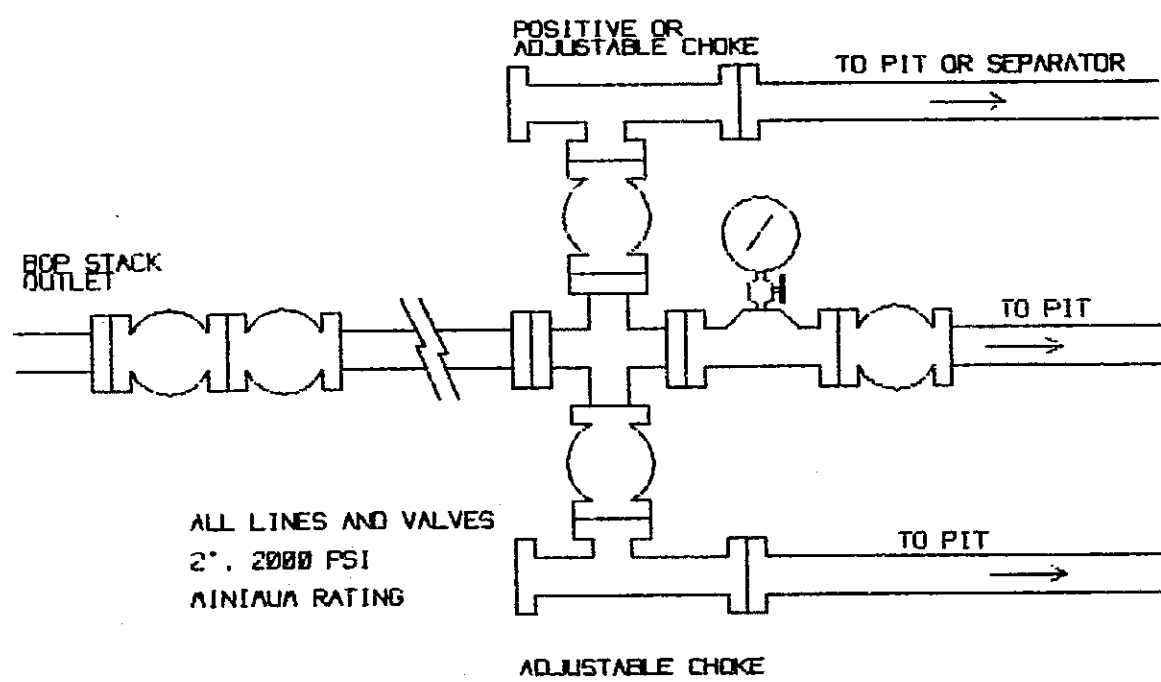
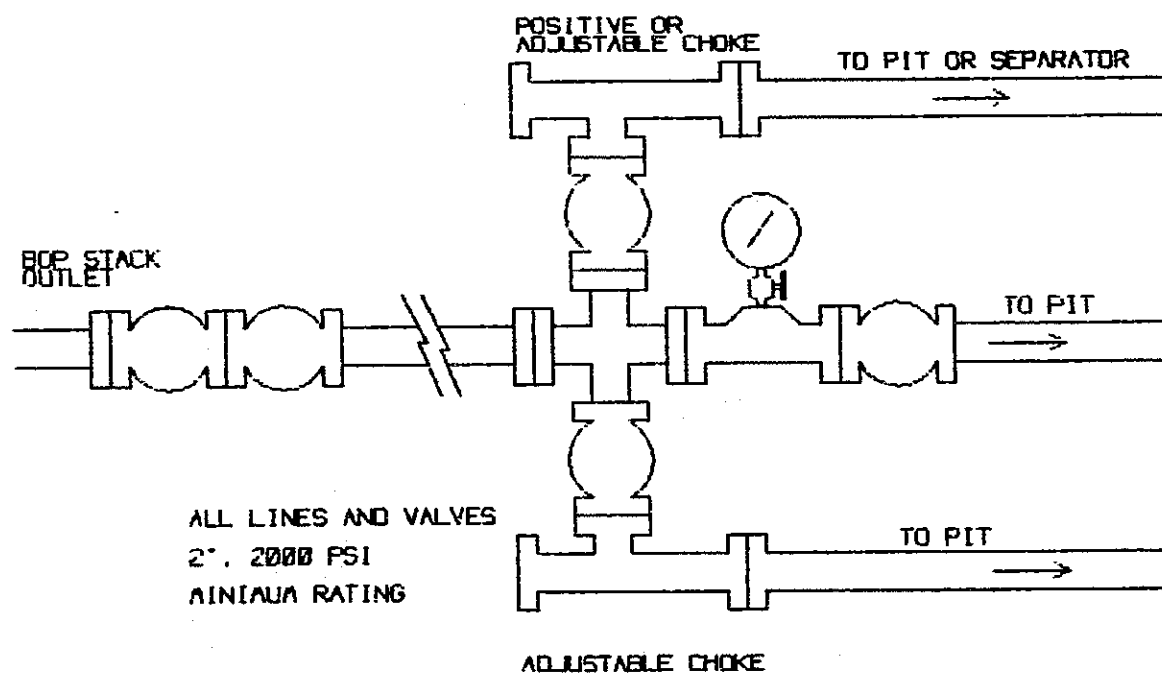


EXHIBIT B - CHOKE MANIFOLD



DETAILED DRILLING PROGRAM

DATE: April 26, 1990
WELL NAME: Black Rock WELL NO: 12
LOCATION: 1527' FSL, 1165' FWL
Section 7, Township 40N, Range 29E
Apache County, Arizona
ELEVATION: 5679' GR / 5693' KB
TOTAL DEPTH: 5266'
PROJECTED HORIZON: Paradox at 4317'.

DRILLING, CASING AND CEMENTING PROGRAM

1. Move in and rig up rotary tools. Notify BLM of intent to run surface casing and time of spud.
2. Drill mouse hole and rat hole. Mix mud prior to spudding well.
3. Drill 12 1/4" hole to 500'. Use fresh water gel/lime spud mud for drilling surface hole. Well bore inclination is not to exceed 1 degree at 500'. Deviation surveys will be run at 250' and at casing point.
4. Run 8 5/8", 24 ppf, K55, STC casing to TD. Cement with 370 sks (426 cf) of Class 'G' + 2% CaCl₂ + 1/4 #/sk celloflake (sufficient slurry volume to circulate cement to surface).
5. W.O.C. a minimum of 4 hours prior to cutting off casing. Nipple up BOP stack and related equipment. See BOP schematics for details.
6. Insure that the cement slurry has been static at least 8 hours before proceeding with pressure testing operations. Pressure test BOP to 2000 psi for 30 minutes. Pressure test manifold and all related equipment to 2000 psi. Pressure test casing to 1500 psi for 30 min.
7. Drill out of surface casing with 7 7/8" bit. Drill 7 7/8" hole to TD. Deviation surveys are to be taken every 500' or on bit trip whichever occurs first. Maximum allowable deviation will be 5 degrees at TD with the maximum allowable rate of change to be 1 degree/100'.
8. Run open hole logs and evaluate. Drill-stem test as per well site geologist's recommendation.

9. If well is determined to be commercial, run 5 1/2", 15.50 ppf, K55 casing to TD. Set stage cementing collar at +/- 3000'. Cement in two stages as follows:

First Stage

TD to 3000' (stage collar @ 3000'). 350 sks Class 'G' GAS-BLOCK slurry system + .25 #/sk celloflake (15.8 ppg, 1.14 cf/sk). Total of 398 cf.

Circulate 4 hours between stages.

Second Stage

3000' to surface. Lead with 224 sks Class 'G' 65/35 poz + 6% gel + .25 #/sk celloflake (12.7 ppg, 1.85 cf/sk), tail with 100 sks Class 'G' + 2% CaCl₂ (15.6 ppg, 1.15 cf/sk). Total of 530 cf.

Note: Exact slurry volumes for the production string will be adjusted based on the caliper log to be run prior to cementing.

10. Nipple down BOPE. Set 5 1/2" casing slips, cut off casing. Install well head. Release drilling rig and move rig off location.
11. If well is non-productive it will be plugged and abandoned as per State, BLM, BLM, and Navajo Tribal stipulations.

Black Rock No. 12
Section 7, Township 40N, Range 29E
1527' FSL, 1165' FWL
Apache County, Arizona

GENERAL COMPLETION PROCEDURE

If the well is determined to be productive in the Paradox formation, move in completion rig. Perforate, acidize, and test each productive porosity zone. Completion work will commence after Sundry Notice approval is received. Detailed procedures to follow.

PLUGGING AND ABANDONMENT

If the well is determined not to be productive, the well bore will be plugged as per BLM instructions.

Black Rock #12

SURFACE USE PLAN

1. EXISTING ROADS

Shown on the attached topographic map, are the existing roads in the immediate area. Outlined are the roads to be used from Road 5049, 9 miles west of Teec Nos Pos Arizona (exhibit 1). Existing roads will be maintained while operations are in progress.

2. PLANNED ACCESS ROAD (SHOWN IN RED)

The access road as shown on the topographic map will exit from road 5049. The road will be flat bladed, constructed 14' in width, and maintained as necessary to prevent excessive damage to the existing terrain. The road will be upgraded if commercial production is established. An estimated 0.1 miles of new road will be constructed to the location pad.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

The existing wells and facilities are shown on the topographic map (exhibit 1).

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

Production facilities will be utilized at the central compressor and production station located in section 8. Glycol pumps and a compressor may be required at a later date and will be installed on the location pad.

5. LOCATION & TYPE OF WATER SUPPLY

Water will be acquired from a private source. The water will be hauled from a flowing well permitted to Hay Hot Oil, Inc., permitted under Water Right 09-1419, A60809.

6. SOURCE OF CONSTRUCTION MATERIALS

The need for additional construction materials is not anticipated. In the event additional materials are required, they will be acquired from private sources or with the approval of the Navajo Nation.

7. METHODS OF HANDLING WASTE MATERIAL

Trash will be contained on location in an enclosed trash bin. It will be hauled to an approved disposal site or burned on location if a burning permit is granted. The reserve pit will be lined with an approved 7 mil liner for containing drilling fluids. The pit will be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, backfilled, and restored to the natural terrain.

8. PORTABLE TOILET

Chemical portable toilet facilities will be provided on location during drilling and completion operations.

9. ANCILLARY FACILITIES

No camps or air strips are planned for this well.

10. WELL SITE LAYOUT

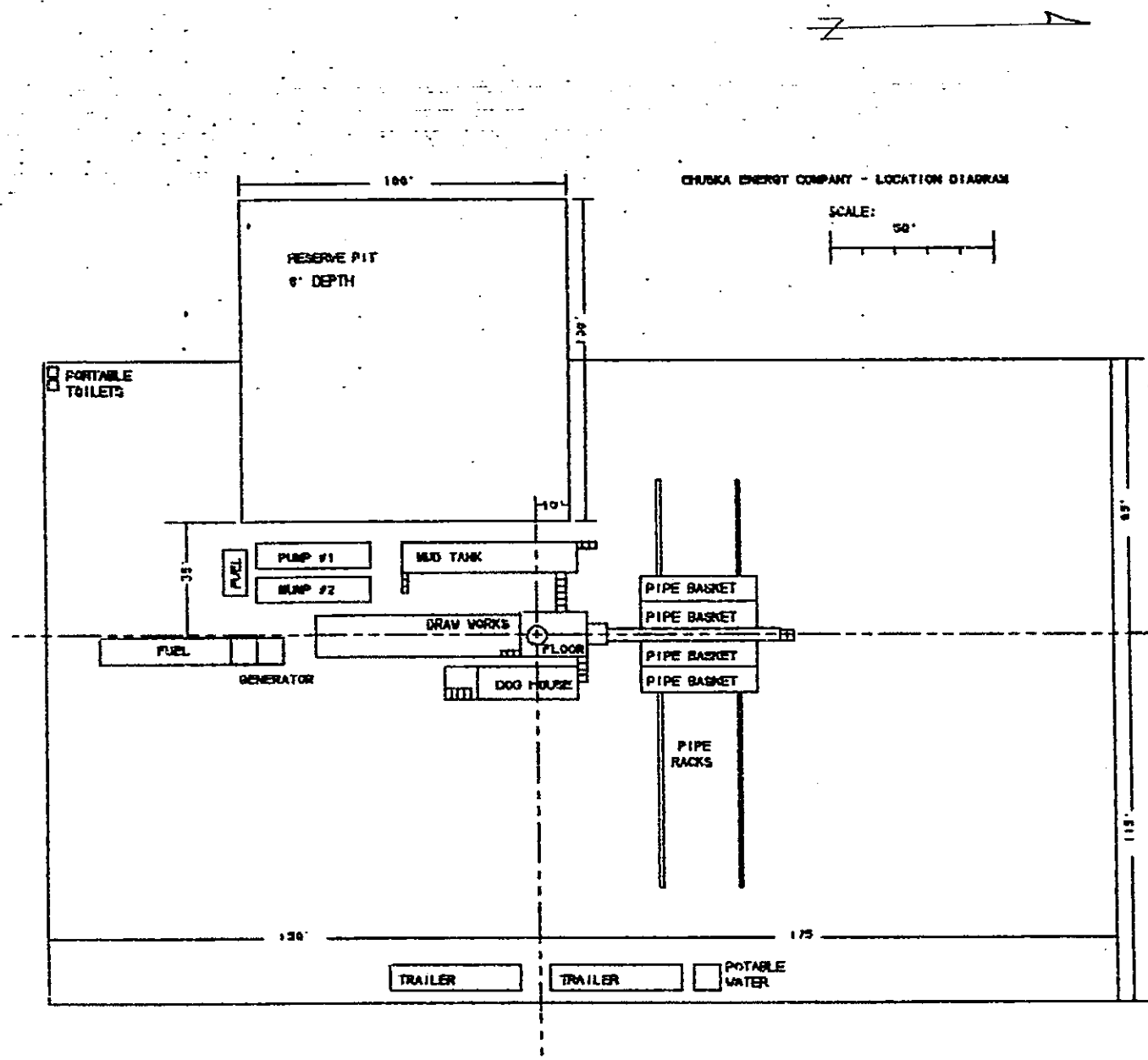
Attached is a surveyor's staking plat, cut and fill requirements and a schematic of the proposed rig layout.

11. PLANS FOR RESTORATION OF THE SURFACE

Top soil removed from the pad, will be stored at the well site. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation/disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned to its original condition as much as possible. Rehabilitation seeding will be in accordance with the APD/BLM/BIA stipulations.

12. LOCATION CONSTRUCTION

The location is laid out on a north/south trend requiring 12' of fill on the northwest corner and 12' of cut on the southwest corner. The reserve pit will be built on terrain containing sparse native vegetation. No residents are in the immediate area.



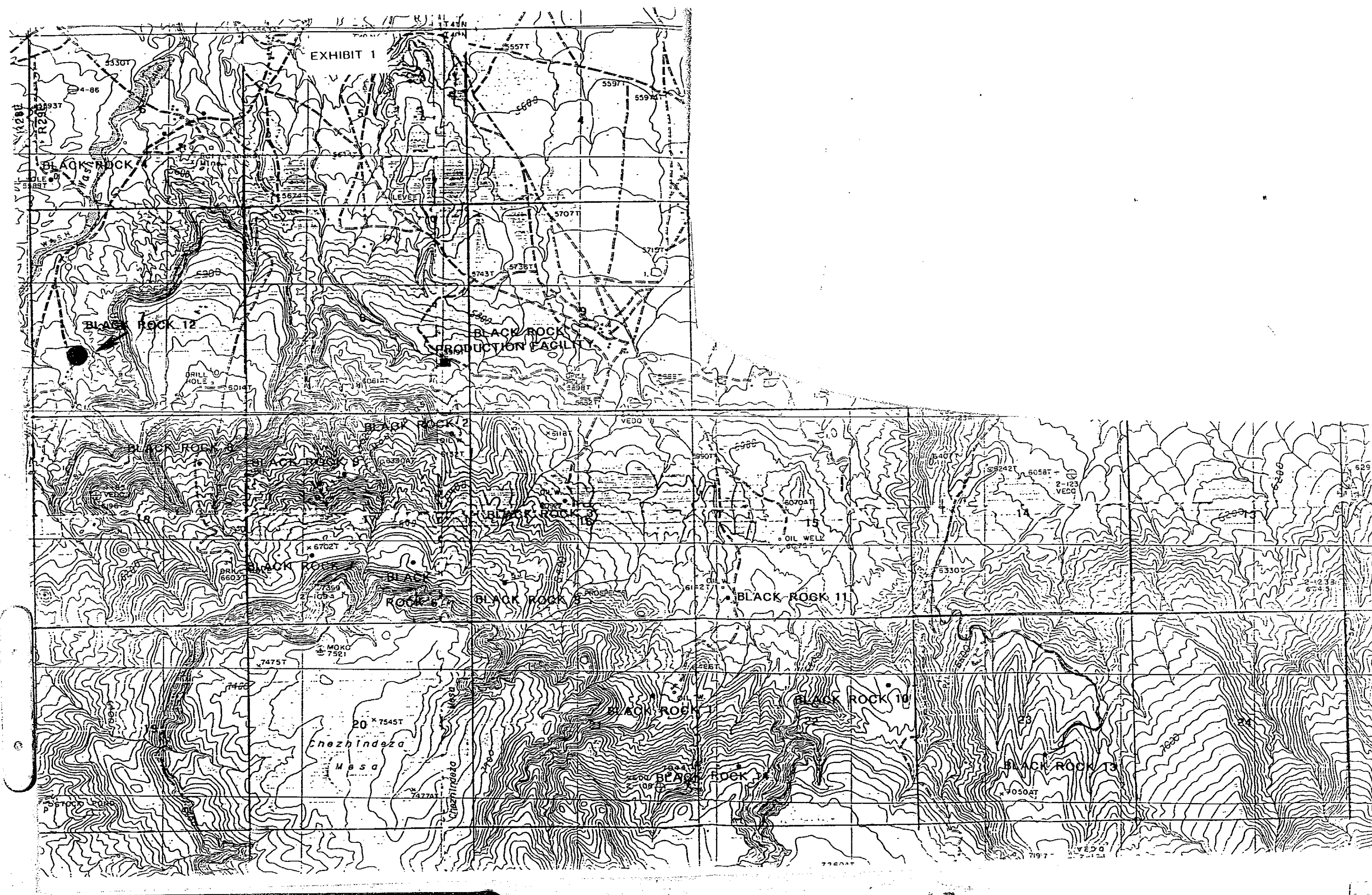
13. OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
315 NORTH BREHREND AVENUE
FARMINGTON, NEW MEXICO 87401
DONALD S. BARNES

14. CERTIFICATION

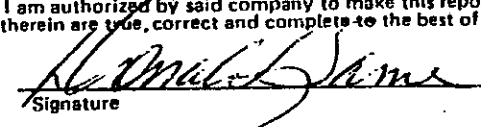
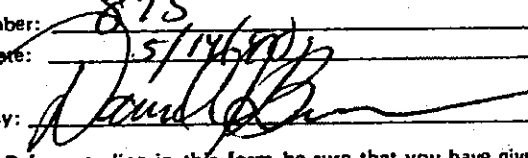
I hereby certify that either I, or persons under my direct supervision have inspected the proposed drillsite and access route: that I am familiar with the conditions which presently exist: that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work planned will be performed by Chuska Energy or its sub-contractors, in conformity with the terms and conditions under which it is approved.


DONALD S. BARNES
Operations Manager



... LINDSEY CO., BLACK ROCK #12
SECTION-29E NW SW #875

Well	1527
Field and	Black
Distance in	8 miles
Proposed	526

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER APPLICATION TO DRILL <input checked="" type="checkbox"/> RE-ENTER OLD WELL <input type="checkbox"/>			
NAME OF COMPANY OR OPERATOR			
Chuska Energy Company			
Address		City State	
P. O. Box 780, Farmington, New Mexico 87401			
Drilling Contractor			
To be Determined			
Address			
DESCRIPTION OF WELL AND LEASE			
Federal, State or Indian Lease Number, or if fee lease, name of lessor		Well number Elevation (ground)	
NOG 8702-1116 Navajo Tribal		Black Rock #12 5679' GR	
Nearest distance from proposed location to property or lease line:		Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:	
1165' feet		4060 feet	
Number of acres in lease:		Number of wells on lease, including this well, completed in or drilling to this reservoir:	
50,000		13	
If lease, purchased with one or more wells drilled, from whom purchased: Name Address			
N/A			
Well location (give footage from section lines)		Section—township—range or block and survey	
1527' FSL x 1165' FWL		Sec. 7, T40N, R29E	
Field and reservoir (if wildcat, so state)		Dedication (Comply with Rule 105)	
Black Rock Paradox		SW 1/4	
Distance in miles, and direction from nearest town or post office			
8 miles west/southwest of Teec Nos Pos, Arizona			
Proposed depth:		Rotary or cable tools	
5266' <i>SEE</i>		Rotary	
Bond Status <i>Pending approved</i>		Organization Report	
Amount \$25,000		On file <input checked="" type="checkbox"/> Or attached	
Approx. date work will start			
7-15-90			
Filing Fee of \$25.00			
Attached <input checked="" type="checkbox"/>			
Remarks:			
API No. 02-001-20294			
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Operations Manager</u> of the <u>Chuska Energy Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.			
 Signature			
5-7-90 Date			
Permit Number: <u>875</u> Approval Date: <u>5/14/90</u> Approved By: 		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Application to Drill or Re-enter File Two Copies	
Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.		Form No. 3	

1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO _____.
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description

CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name: Roy A. Rush

Position: Surveyor

Company: Powers Elevation Co., Inc

Date: April 8, 1990

I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true to the best of my knowledge and belief.

Date Surveyed: April 6, 1990

Registered Professional Engineer and/or Land Surveyor

Roy A. Rush

Certificate No. 19348

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
8 5/8	24	K55 STC	0	500	500 - surf	370 sks	Class 'G'
5 1/2	15.5	K55 STC	0	5266	5266 - 3000	350 sks	GAS BLOCK
					3000 - surf	224 sks	65/35/6
						100 sks	Class 'G'

STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION

REQUIREMENTS FOR PROPOSED OPERATIONS

PERMIT NO. 875

Chuska Energy Company
315 N. Behrend
Farmington, NM 87401

Phoenix, Arizona
May 14, 1990

Your proposal to drill well Black Rock No. 12, A.P.I. No. 02-001-20294, Section 7, T. 40N, R. 29E, G&SR B. & M., Black Rock field, Apache County, dated 4/26/90, received 4/30/90 has been examined in conjunction with records filed in this office.

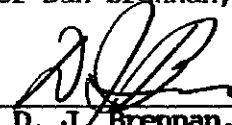
THE PROPOSAL IS APPROVED PROVIDED:

1. Mud pits are constructed and lined in a manner that will prevent contamination of surface or subsurface waters.
2. Drilling mud consistent with sound drilling practices shall be used at all times and sufficient amounts of lost circulation material shall be available at the drill site.
3. The well shall be cased and cemented in such a manner that will protect all zones that contain oil, gas, or fresh water.
4. Blowout prevention equipment shall be installed, tested, and maintained in a manner necessary to assure well control throughout the drilling, completion, or abandonment of the well.
5. Monitoring for H₂S shall be continuous from 3500' to T.D. An H₂S Safety Representative shall be on site for all Drill Stem Tests, cores, trip gas, and circulation of bottoms up.
6. Sundry reports shall be filed as required.
7. Two sets of samples of all cores and cuttings shall be taken at a maximum interval of ten feet. One set each shall be shipped prepaid to:
 - a. Oil & Gas Commission, 5150 N. 16th St., Ste. B141, Phoenix, AZ 85016.
 - b. Arizona Geological Survey, 845 N. Park Ave., Tucson, AZ 85719.
8. Samples and all logs and surveys of any description shall be filed within 30 days after the removal of the rig from the hole.
9. Application to Plug and Abandon (Form 9) shall be submitted to the Commission for approval prior to the beginning of operations to plug the well.
10. THIS COMMISSION SHALL BE NOTIFIED:
 - a. Immediately when drilling operations commence.
 - b. In time to witness running and cementing of surface casing.
 - c. In time to witness pressure test of BOPE prior to drilling out of surface casing.
 - d. In time to witness plugging and abandonment operations.

To witness operations, call 602-255-5161.

After office hours notify: Steve Rauzi, 602-864-9148 or Dan Brennan, 602-971-2909.

C.D. # 2578904, Valley National Bank

By 
D. J. Brennan, Executive Director

A COPY OF THIS REPORT AND THE PROPOSAL MUST BE POSTED AT THE DRILLER'S STATION PRIOR TO COMMENCING OPERATIONS.

RECORDS FOR WORK DONE UNDER THIS PERMIT ARE DUE WITHIN 30 DAYS AFTER THE WORK HAS BEEN COMPLETED OR THE OPERATIONS HAVE BEEN SUSPENDED.



PERMIT TO DRILL

This constitutes the permission and authority from the
OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: CHUSKA ENERGY COMPANY
(OPERATOR)

to drill a well to be known as

BLACK ROCK #12
(WELL NAME)

located 1517' 150' & 1550' NW

Section 7 Township 40N Range 29E, Apache County, Arizona.

The Southwest Quarter of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 14th day of May, 19 90.

OIL AND GAS CONSERVATION COMMISSION

By [Signature]

EXECUTIVE DIRECTOR

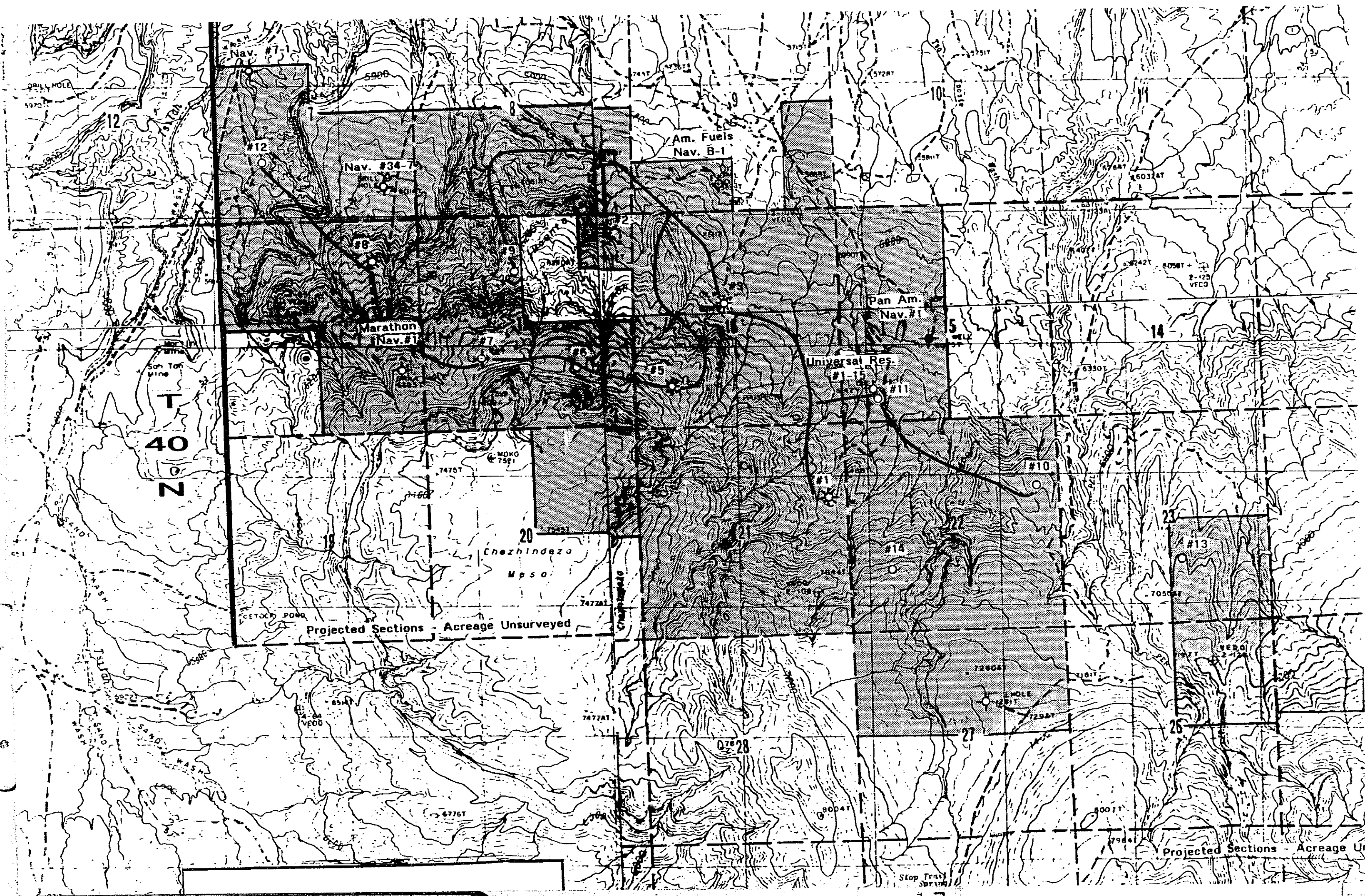
PERMIT 00875

RECEIPT NO. 2048

A.P.I. NO. 01-001-20,21

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27



BLACK ROCK #12
UN-23E NW SW 1875

BLACK ROCK FIELD

Operator: RIM Southwest Corporation

Bond Company*: Indian lands, evidence of bond posted with BIA

RLI Insurance Co. \$150,000 BIA Nationwide Bond No. RLB0003993

Date of Bond: 11/26/01

Date approved: _____

*** Pursuant to Commission motion of October 31, 1997, no bond required with State of Arizona upon evidence of bond posted with the BIA.**

Permits covered by this bond posted with the BIA:

Dry Mesa Field	<u>077</u>
	<u>106</u>
	<u>115</u>
	<u>852</u>
	<u>907</u>

Black Rock Field	<u>559</u>
	<u>581</u>
	<u>868</u>
	<u>871</u>
	<u>875</u> ✓
	<u>882</u>



Jane Dee Hull
Governor

State of Arizona
Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

February 13, 2001

CERTIFIED MAIL

Mr. Robert L. Vesco
Vice-President
RIM Southwest Corporation
5 Inverness Drive East
Denver CO 80112

Re: Release of State-wide Performance Bond CD #2578904

Dear Mr. Vesco:

This will acknowledge evidence of RIM Southwest Corporation's bonding with the U.S. Department of the Interior, Bureau of Indian Affairs. As a result, the referenced certificate of deposit and executed release form are enclosed.

Sincerely,

A handwritten signature in cursive script, reading "Steven L. Rauzi".

Steven L. Rauzi
Oil & Gas Administrator

Enclosures

SECURITIES SAFEKEEPING

1700 WEST WASHINGTON ST. - PHOENIX, ARIZONA 85007

DATE: 02/05/01

STATE AGENCY NO. _____

STATE AGENCY ARIZONA GEOLOGICAL SURVEY/OIL&GAS COMM.

State Treasurer's Use Only

COMPANY CHUSKA ENERGY CO. / Harken Southwest Corp.
1850 MT DIABLO BLVD STE 540
WALNUT CA 94500

DOMESTIC FOREIGN

DEPOSIT

C.D. NO.:

BANK:

MATURITY DATE:

INTEREST RATE:

%

AMOUNT \$

C.D. ASSIGNMENT MUST BE ATTACHED UNLESS C.D. IS PAYABLE TO STATE TREASURER

RELEASE

C.D. NO.: 2578904
 ACCT NO.: 8272-4968
 BANK: VALLEY NATIONAL BANK OF ARIZONA

MATURITY DATE: 05/30/90

INTEREST RATE: 7.30 %

AMOUNT \$ 25,000.00

STATE TREASURER VALIDATION NO. _____

RECEIVED THE ABOVE RELEASE

STATE AGENCY AUTHORIZATION

BY Tony D. Nelson 05 Feb 01
 Authorized Signature Date

BY Tony D. Nelson 05 Feb 01
 Authorized Signature

ARIZONA GEOLOGICAL SURVEY
 Bank or Firm

STATE TREASURER AUTHORIZATION
 BY Katherine M. Nelson
 Authorized Signature

FOR BANK USE ONLY

BANK AUTHORIZATION

Checked by

Verified by

BY _____
 Authorized Signature

STATE'S DEPOSITORY BANK



Jane Dee Hull
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

February 5, 2001

Ms. Debby Harrington
RIM Southwest Corporation
5 Inverness Drive East
Denver CO 80112

Dear Ms. Harrington:

This will acknowledge receipt of documentation of name change,
Organization Report (Form 1) and updated Operator's Certificate of Compliance and
Authorization to Transport Oil or Gas from Lease (Form 8).

I have enclosed approved duplicate originals of Form 8 for your files.

Sincerely,

A handwritten signature in cursive script, reading "Steven L. Rauzi".

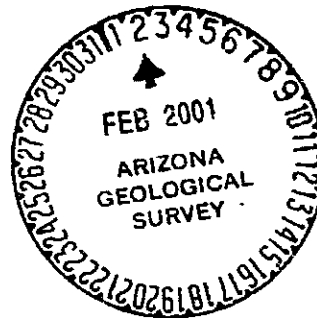
Steven L. Rauzi
Oil & Gas Administrator

Enclosures

RIM SOUTHWEST CORPORATION
5 INVERNESS DRIVE EAST
ENGLEWOOD, COLORADO 80112
303-799-9828

January 30, 2001

Mr. Steven Rauzi
Oil & Gas Program Administrator
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ. 85701



Re: RIM Southwest Corporation


Dear Mr. Rauzi,

As you requested, please find an Organization Report and documentation evidencing the name change from Harken Southwest Corporation for RIM Southwest Corporation.

Also enclosed is Form 8, in duplicate, for NOG 8707-1139, NOG 8707-1140 and NOG 8707-1142.

Please call me at (303) 799-9828, extension 305, if you have any questions or need anything further. Thank you for your assistance.

Very truly yours,


Debby Harrington
Senior Landman

The RIM Companies
5 Inverness Drive East
Englewood, Colorado 80112
303-799-9828
Fax 303-799-4259
E-Mail: rvesco@rimop.com



January 25, 2001

Mr. Steven Rauzi (520) 770-3500
Oil & Gas Program Administrator Fax (520) 770-3505
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ. 85701

RE: Bonding for RIM Southwest Corporation

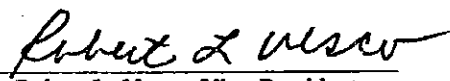
Dear Mr. Rauzi:

Enclosed please a copy of the approval letter dated May 18, 2000, from the United States Department of the Interior, Bureau of Indian Affairs for RIM's \$150,000 nationwide bond.

Additionally, RIM Southwest Corporation, (formerly known as Harken Southwest Corporation) has a \$25,000 certificate of deposit, certificate # 2578904, with the State of Arizona, maturing April 2, 2001. Please take the necessary action to release this certificate of deposit.

If you need any further information regarding the above referenced information, please contact me at extension 206. Thank you for your help.

Sincerely yours,


Robert L. Vesco, Vice-President
Secretary/Treasurer

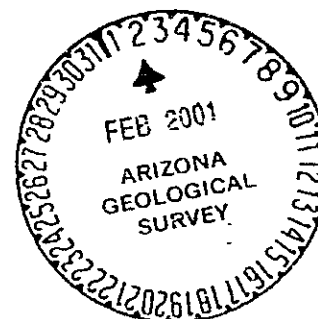
The RIM Companies
5 Inverness Drive East
Englewood, Colorado 80112
303-799-9828
Fax 303-799-4259
E-Mail: rvesco@rimop.com



Oil & Gas
Acquisitions & Management
Rocky Mountains / Texas

January 25, 2001

Mr. Steven Rauzi
Oil & Gas Program Administrator
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ. 85701



RE: Name Change of Harken Southwest Corporation

Dear Mr. Rauzi:

Enclosed please find the State of New Mexico filed copy of "Articles of Amendment to the Articles of Incorporation" changing "Harken Southwest Corporation's" name to "RIM Southwest Corporation" ("RIM"). The corporation's federal tax identification number has not changed (85-0284260). RIM's address is 5 Inverness Drive East, Englewood, Colorado 80112.


Additionally, the officers of RIM Southwest Corporation are as follows:

President	Stephen W. Rector
Vice President	Rene' Morin
Vice President	William J. Holcomb
VP, Secretary/Treasurer	Robert L. Vesco

Additionally, enclosed is a copy of RIM Operating, Inc. and RIM Offshore, Inc.'s "United States Department of the Interior, Bureau of Indian Affairs, Nationwide Oil and Gas Bond Number RLB0001937" in the amount of \$150,000, along with Bond Rider to Assume Liability Number 1 and RLI Insurance Company's Power of Attorney. With your concurrence, RIM would like to add RIM Southwest Corporation as an additional principal to this bond. Please coordinate with us regarding this matter.

If you need any further information regarding the above referenced information, please contact me at extension 206.

Sincerely yours,


Robert L. Vesco, Vice-President
Secretary/Treasurer

Operator CHUSKA ENERGY COMPANY (Harken Southwest Corp.)

Bond Company VALLEY NATIONAL BANK - ARIZONA Amount \$25,000

Bond No. C.D. #2578904 Date Approved 12/01/89

Permits covered by this bond:

559

581

610 (P+A 11-21-95)

615 (P & A 5/10/91)

868

869 expired

870 (J & A 5/90)

871

872 expired

873 (P & A 8/4/93)

874 expired

875

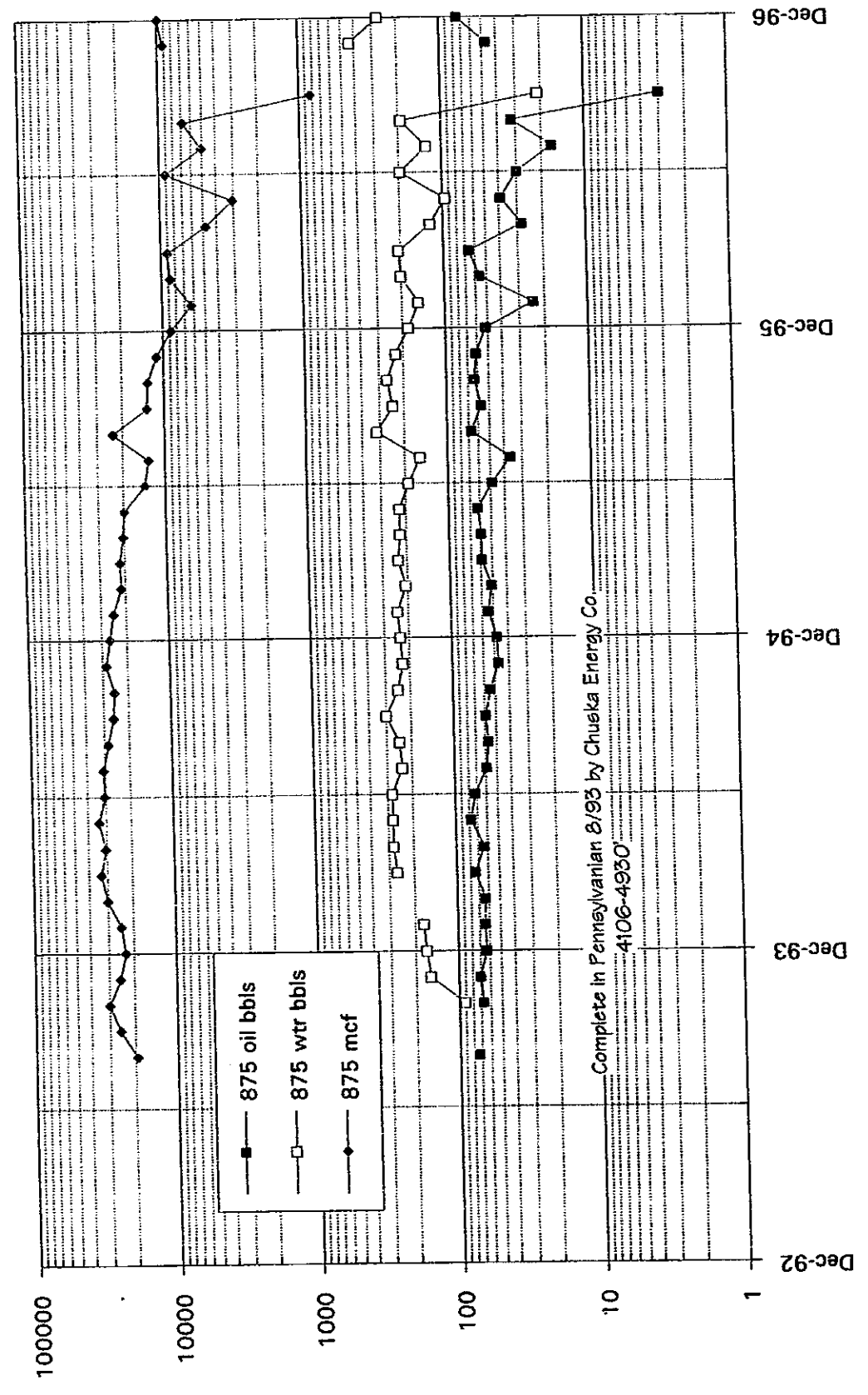
881

CANCELLED

DATE

MONTHLY PRODUCTION AT 12 BLACK ROCK (875), ARIZONA: AUG 1993 - DEC 1996

nw sw 7-40n-29e, Black Rock Field, Apache County



HARKEN
ENERGY
CORPORATION



March 11, 1994

State of Arizona
Oil & Gas Conservation Commission
845 N. Park Avenue, Suite 100
Tucson, AZ 85719

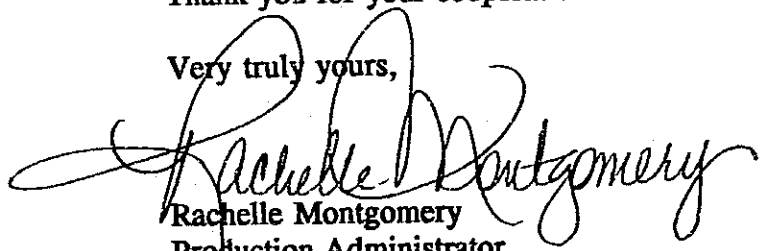
Re: NOG 8702-1139
NOG 8702-1140
NOG 8702-1142
Black Rock Well No.'s 1, 3, 5, 8 and 12

Gentlemen:

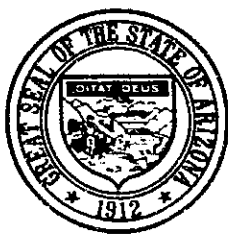
Please be advised that Harken Southwest Corporation no longer has a Farmington, New Mexico office. Therefore, please direct all future correspondence, regarding regulatory issues, to the undersigned at the letterhead address.

Thank you for your cooperation.

Very truly yours,


Rachelle Montgomery
Production Administrator

RM/jkw



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

March 9, 1994

Ms. Katherine L. Valentin
State Treasurer's Office
1700 West Washington
Phoenix, Arizona 85007

Dear Katherine:

I received the enclosed letter from the corporate office of Harken Southwest (formerly Chuska Energy Company). Please file this copy with the assignment for Valley National Bank Certificate of Deposit No. 2578904, which you are holding in safekeeping for the Oil and Gas Conservation Commission.

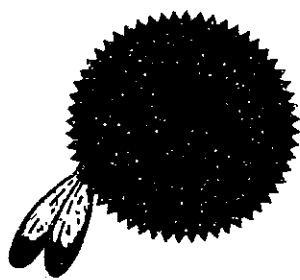
Thank you.

Sincerely,

Steve

Steven L. Rauzi
Oil & Gas Program Administrator

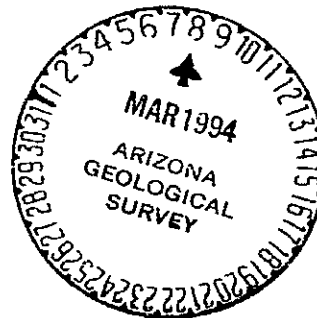
Enclosure



HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

March 2, 1994



Mr. Steven Rauzi
Oil & Gas Program Administrator
Arizona Geological Survey
845 Northpark Ave., Suite 100
Tucson, Arizona 85719

Re: Chuska Energy Company-Arizona Statewide Bond for Drilling of Wells

Dear Mr. Rauzi:

Please be advised that with regard to the above referenced bond we are herewith enclosing documentation relating to a name change. Chuska Energy Company has now changed its name to Harken Southwest Corporation. Copies of the official documentation relating to this change of name are enclosed. We would appreciate the Arizona Geological Survey changing their records to style the above referenced bond as follows:

Harken Southwest Corporation, formerly Chuska Energy Company

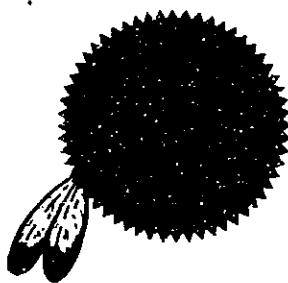
Sincerely

HARKEN SOUTHWEST CORPORATION

Dale Brooks

Dale Brooks
Treasurer

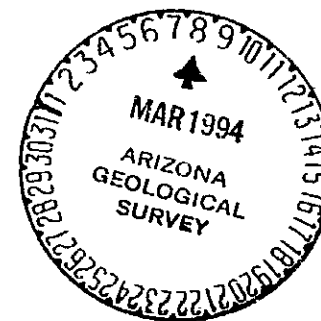
DB:le
Enclosures
cc:Bruce N. Huff



HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

March 2, 1994



Mr. Steven Rauzi
Oil & Gas Program Administrator
Arizona Geological Survey
845 Northpark Ave., Suite 100
Tucson, Arizona 85719

Re: Chuska Energy Company-Arizona Statewide Bond for Drilling of Wells

Dear Mr. Rauzi:

Please be advised that with regard to the above referenced bond we are herewith enclosing documentation relating to a name change. Chuska Energy Company has now changed its name to Harken Southwest Corporation. Copies of the official documentation relating to this change of name are enclosed. We would appreciate the Arizona Geological Survey changing their records to style the above referenced bond as follows:

Harken Southwest Corporation, formerly Chuska Energy Company

Sincerely

HARKEN SOUTHWEST CORPORATION

Dale Brooks
Treasurer

DB:le
Enclosures
cc: Bruce N. Huff

STATE OF NEW MEXICO



OFFICE OF

THE STATE CORPORATION COMMISSION

CERTIFICATE OF GOOD STANDING AND COMPLIANCE

IT IS HEREBY CERTIFIED that:

HARKEN SOUTHWEST CORPORATION

1070770

a corporation organized under the laws of

NEW MEXICO

is duly authorized to transact business in New Mexico, as
a Domestic Profit corporation, under the

BUSINESS CORPORATION ACT

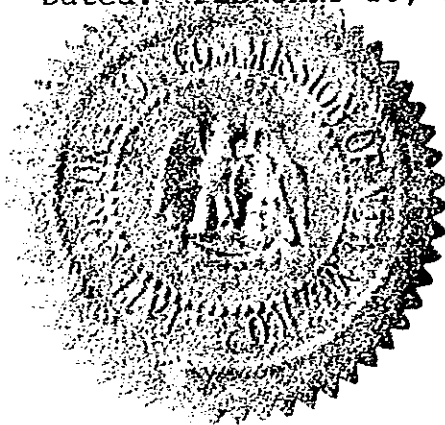
(53-11-1 to 53-18-12 NMSA 1978)

having filed its Articles of Incorporation SEPTEMBER 11, 1980
and Certificate of Incorporation issued as of said date.

IT IS FURTHER CERTIFIED that the fees due the State Corporation Commission, which have been assessed against the aforesaid corporation, have been paid to date and aforesaid corporation is in corporate good standing and duly authorized to transact business as its corporate existence has not been revoked in New Mexico. This Certificate is not to be construed as an endorsement, recommendation or notice of approval of the corporation's financial condition or business activities and practices. This Certificate of Good Standing and Compliance expires MARCH 15, 1995

Dated: FEBRUARY 16, 1994

In Testimony Whereof, the State Corporation Commission of the State of New Mexico has caused this certificate to be signed by its Chairman and the Seal of said Commission to be affixed at the City of Santa Fe



Jim P. Serna
Chairman

Alfred R. Baker
Director

STATE OF NEW MEXICO



OFFICE OF

THE STATE CORPORATION COMMISSION

CERTIFICATE OF AMENDMENT

OF

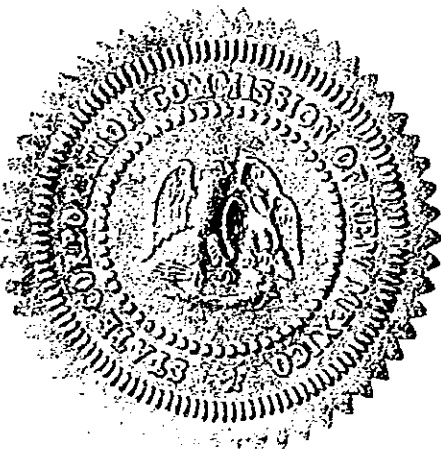
HARKEN SOUTHWEST CORPORATION

3080801

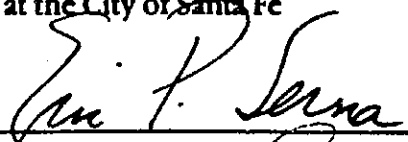

The State Corporation Commission certifies that duplicate originals of the Articles of Amendment attached hereto, duly signed and verified pursuant to the provisions of the
BUSINESS CORPORATION ACT
(53-11-1 to 53-18-12 NMSA 1978)
have been received by it and are found to conform to law.

Accordingly, by virtue of the authority vested in it by law, the State Corporation Commission issues this Certificate of Amendment and attaches hereto a duplicate original of the Articles of Amendment.

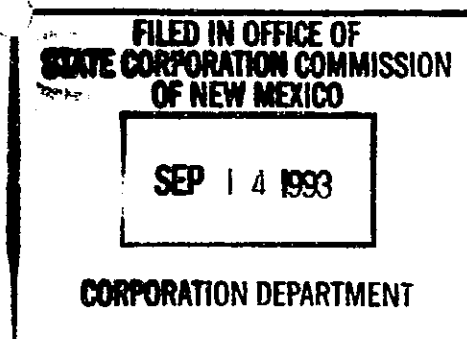
Dated: SEPTEMBER 14, 1993



In Testimony Whereof, the State Corporation Commission of the State of New Mexico has caused this certificate to be signed by its Chairman and the Seal of said Commission to be affixed at the City of Santa Fe


Chairman

Director

3080801
ARTICLES OF AMENDMENT
TO THE
ARTICLES OF INCORPORATION
OF
CHUSKA ENERGY COMPANY



Pursuant to the provisions of Section 53-13-4 of the New Mexico Business Corporation Act, the undersigned corporation adopts the following Articles of Amendment to its Articles of Incorporation.

FIRST: The name of the corporation is CHUSKA ENERGY COMPANY.

SECOND: The following amendments to the Articles of Incorporation were adopted by the shareholders of the corporation on July 8, 1993, in the manner prescribed by the New Mexico Business Corporation Act:

ARTICLE ONE is amended and shall read as follows:

"The name of the corporation is HARKEN SOUTHWEST CORPORATION."

THIRD: The number of shares of the corporation outstanding at the time of such adoption was 20,000 and the number of shares entitled to vote thereon was 20,000.

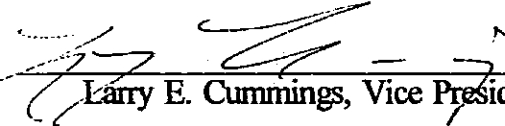
FOURTH: The number of shares voted for such amendment was 20,000 and no shares were voted against such amendment; there is only one class of shares.

FIFTH: The Amendment does not provide for any exchange, reclassification or cancellation of issued shares.

Dated: September 1, 1993

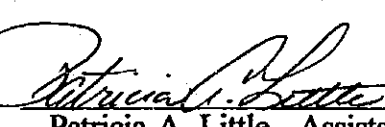
CHUSKA ENERGY COMPANY

By:


Larry E. Cummings, Vice President

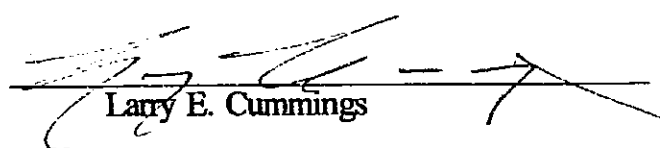
and

By:

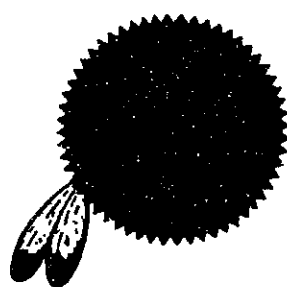

Patricia A. Little, Assistant Secretary

SEP 14 1993

The undersigned does hereby certify that the undersigned is one of the corporate officers who executed the foregoing document on behalf of the corporation, and that the statements contained therein are true.


Larry E. Cummings

Documents/Name.chg/pl/BNH



HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

January 28, 1994

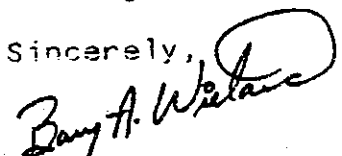
We are pleased to announce that Chuska Energy Company has changed its name to Harken Southwest Corporation. This is in line with the February, 1993 merger with Harken Exploration Company.

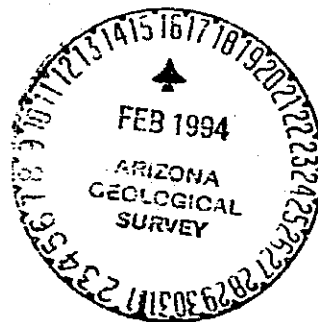
Harken Southwest Corporation will continue to be located at 3315 Bloomfield Highway, Farmington, New Mexico 87401. Our telephone number will remain (505) 326-5525.

Please reflect this name change on all future correspondence.

Thank you for your assistance in this matter. We look forward to working with you as Harken Southwest Corporation.

Sincerely,


BARRY A. WIELAND
Operations Manager



file 875

Chuska Extends Northeastern Arizona's Black Rock Field

CHUSKA ENERGY Co gauged a flow of 1,500,000 cu ft of gas per day from Paradox at a stepout from Black Rock field, a Pennsylvanian/Mississippian pool on Navajo Indian lands 10 miles west of

Tec Nos Pos in northeastern Arizona.

The northeastern Apache County producer, the 12 (formerly 10) Black Rock in nw sw 7-40n-29e, was set up as a 5266-ft test of Paradox

zones and drilled by Aztec Well Servicing's Rig #301. No other completion details are yet available.

The well is within three quarters of a mile west-northwest of two abandoned producers on the northwestern flank of Black Rock field. The closer of the two, the 34 Navajo-7 in sw se 7-40n-29e, produced 5,990 bbls of 34° oil with small amounts of gas and water from Mississippian at 5562-67 ft before being abandoned. The 12 Black Rock is nearly a mile northwest of the northwesternmost active producer in the field.

Chuska earlier this year staked location for a 5914-ft test of Paradox and Mississippian zones at the 11 Black Rock in sw sw 15-40n-29e. The latter site is about 110 ft southeast of an abandoned Paradox producer completed by Universal Resources in 1972 on the southeastern flank of Black Rock field and a little more than three miles southeast of the company's 12 Black Rock well.

Since going on line in 1973, Black Rock field has produced about 4.66 billion cu ft of gas, 21,130 bbls of oil and 270,357 bbls of water. Four active field wells in July produced a combined average of 813,000 cu ft of gas per day.

(UPRC, continued from Page 1)

County, will be drilled by a Murfin Drilling rig nearly one and a half miles north-northeast of Speaker field, a Morrow oil and gas pool being developed by Union Pacific and Mustang Oil & Gas that surpassed the one-million-bbl mark in August (PI 11-1-93).

The new venture is half a mile north of the company's 1 Flathead 14-31, sw sw 31-11s-50w, a Morrow test completed this summer as a 6765-ft dry hole.

Approximately eight miles to the southeast, in neighboring Cheyenne County, Union Pacific is drilling toward an objective of 6600 ft in Morrow at the 1 Brontos 32-35 in sw ne 35-12s-50w. This wildcat is being

drilled by Murfin's Rig #14 about four miles east of Marmaton and Morrow oil production at Bledsoe Ranch field.

Elsewhere in Cheyenne County, Union Pacific, with Cheyenne Drilling's Rig #7 on site, is drilling an offset to an apparent discovery seven miles northeast of Cheyenne Wells. The 1 Peter 41-29, ne ne 29-13s-43w, is projected to 5900 ft in Morrow. It offsets to the northwest Union Pacific's 1 Chunky 12-28 in sw nw 28-13s-43w, a projected 5500-ft Morrow test drilled in June by Cheyenne's Rig #7 with no details disclosed. The area is within a mile east of Shawnee oil production in Mayfield field.

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Rocky Mountain Region Report (USPS 113-170). Price: \$1560 per year. "Northern Edition" Price: \$1320 per year. "Wyoming Edition" Price: \$1320 per year. "Four Corners-Intermountain Edition" Price: \$960 per year. "Southeastern Edition" Price: \$960 per year. "Newsletter Edition" Price: \$888 per year. Published by Petroleum Information Corporation, Monday through Friday except New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day and the day after, 4100 East Dry Creek Road, Littleton, CO 80122. Second class postage paid at Littleton, CO 80122 and additional mailing offices. Postmaster: Send address changes to: Rocky Mountain Region Report, P.O. Box 2612, Denver, CO 80201.



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

August 26, 1993

Mr. Barry Wieland, Operations Manager
Chuska Energy Company
3315 Bloomfield Highway
Farmington, New Mexico 87401

Permit 875

Dear Barry:

In response to my telephone call this morning, I have enclosed a couple of our *well completion report* forms for you to report the completion of Black Rock 10 and 12. Please file a copy of any wireline logs run on these two well with the completion reports.

I have also enclosed a couple of *multipoint and one point back pressure test for gas well*. Please file this form with your completion report for the number 12 well.

In addition, a *plugging record* form is enclosed. Please file this form with your completion report for the number 10 well.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures



Fife Symington
Governor

State of Arizona
Arizona Geological Survey
845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

August 4, 1993

Mr. Barry Weiland, Operations Manager
Chuska Energy Company
3315 Bloomfield Highway
Farmington, New Mexico 87401

Re: Renew permits 875 (Black Rock 12), 873 (Black Rock 10), 874 (Black Rock 11), and
870 (Black Rock 7).

Dear Mr. Weiland:

I have enclosed a receipt for your application fee to renew the referenced permits.
These renewals are good for 90 days. Please keep in mind that you may request extensions
on any of the permits should you decide to further evaluate production before you continue
with your drilling program at the Black Rock Field.

Let me know if I may be of additional assistance.

Sincerely,

A handwritten signature in cursive script, reading "Steven L. Rauzi".

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosure

ARIZONA GEOLOGICAL SURVEY
845 NORTH PARK AVE. #100
TUCSON, ARIZONA 85719

RECEIPT

Date 8-4 1993 No. **3046**

Received From Chuska Energy Company

Address Farmington, N.M.

One hundred dollars and ^{no}/₁₀₀ Dollars \$100.00

For Renew permits BR # 7, 10, 11 & 12

ACCOUNT		HOW PAID	
AMT. OF ACCOUNT		CASH	
AMT. PAID		CHECK	<u>100.00</u>
BALANCE DUE		MONEY ORDER	

By Laurette Colton

Chuska Cases Paradox Prospect in Northeastern Arizona

Since going on line in 1973, Black Rock field has produced about 4.55 billion cu ft of gas with 21,000 bbls of oil and 270,000 bbls of water.

3	R28E ● ☼ ☼	1 ☼	6 ◆ 12 Black Rock ☼ ↙ ◆ ◆	R29E		3 T 40 N
	☼ ◆ ☼ ● Dry Mesa		☼ ◆ ◆ ☼ Black Rock	☼ Black Rock	☼ ☼ ☼ ◆	☼ ◆
					☼	10 Black Rock ☼ ↘
27		25	30			27 ☼

Four active field wells in March produced a combined daily average of 897,000 cu ft of gas, two bbls of oil and one bbl of water.



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

July 13, 1993

Mr. Barry Weiland, Operations Manager
Chuska Energy Company
3315 Bloomfield Highway
Farmington, New Mexico 87401

Re: Black Rock Field, Apache County, Arizona. Wells #12, #10, #11, and #7

Dear Mr. Weiland:

I am sorry that you were unable to reach me before commencing work on the referenced wells. The phone numbers provided with the State Permits are no longer valid because administrative and staff support for the Oil and Gas Conservation Commission is now handled by the Geological Survey here in Tucson; my office number is listed on the letterhead and my home phone number is 602-881-4850. I have enclosed a couple of my cards showing these phone numbers.

I would appreciate your sending me any updates to the drilling prognoses in our files and a sundry summarizing drilling activity. The prognosis we have for the #12 is dated 4-26-90; for the #10, 11-8-89; for the #11, 11-14-89; and for the #7, 10-6-89. Our records show that #7 was junked and abandoned in May 1990. Are you going to drill the #7 from the original location? If so, what is the new location? I also note that Black Rock #13 and #14 are spotted on the map submitted with the #12 prognosis. Do you plan on permitting these two wells soon?

As we discussed on the phone, I will need at least 48 hours notice to allow me enough time to drive to Farmington to witness the circulation of cement on the surface casing and the pressure test of the BOPE and surface casing. Using rig pumps is satisfactory with the Commission.

Finally, I have enclosed a few completion reports for your use upon completion of the wells. Any logs run on the wells can be submitted with the completion report. I do look forward to a successful completion on each of these wells and I hope they lead to additional drilling in Arizona. Do not hesitate to contact me if I can provide any information or additional service.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

Batty Weiland called 7-13-93

Black Rock # 12 (P/N 875)

will set production pipe late tomorrow (Wednesday)

$8\frac{5}{8}$ " csg to 425'

10 bbls amt circulated

AZtec Rig # 301 (505-334-6191)

To move rig on Thursday to # 10, # 11, # 7

Installing H₂S monitor @ 3200'

Nell Lindenmeyer is land rep

Larry Chambers is Drilling Engineer



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

May 20, 1991

Mr. Larry G. Sessions
Operations Manager
Chuska Energy Company
3315 Bloomfield Highway
Farmington, NM 87401

RE: Permit extension for Black Rock 12 (State Permit 875)
Black Rock Field, Apache County, Arizona

Dear Mr. Sessions:

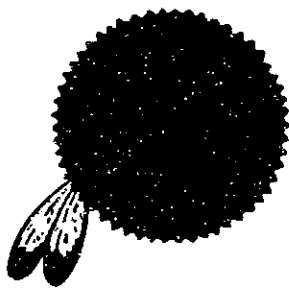
In light of the production history and your continued evaluation of the Black Rock field, we hereby grant a six-month extension to state permit 875 (Black Rock 12).

This extension is good until December 1, 1991.

Sincerely,

A handwritten signature in cursive script that reads "Steven L. Rauzi".

Steven L. Rauzi
Oil & Gas Program Administrator



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

AZ OIL & GAS
CONSERVATION COMMISSION

MAY 13 1991

10 May, 1991

Arizona Oil & Gas Commission
5110 North 16th Street Suite B141
Phoenix, Arizona 85016

Ref: Sundry Notices: Extension to APD for Black Rock #12

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,


Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\BLAKROCK\BR12EXT.CVR

encl.



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

May 14, 1990

Mr. Thomas R. McCarthy
Chuska Energy Company
315 North Behrend
Farmington, NM 87401

RE: Black Rock 12, State permit 875

Dear Tom:

I am enclosing the following for Black Rock 12:

1. Approved application for permit to drill.
2. Permit to drill.
3. Requirements for proposed operations.
4. Receipt.

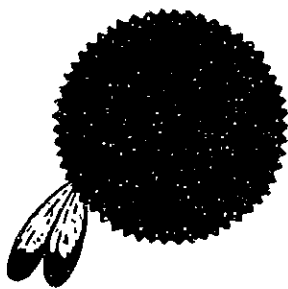
We look forward to a successful completion of your well.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Specialist

Enclosures



CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

875

May 7, 1990

State of Arizona
Oil and Gas Conservation Commission
5150 North 16th Street, Suite B-141
Phoenix, Arizona 85016

ATTENTION: Daniel J. Brennan

RE: Application to Drill - Black Rock #12

Dear Mr. Brennan:

Enclosed you will find copy of the above-referenced APD, which we previously sent to you on a Utah form, rather than the Arizona form.

Please accept our apology for any inconvenience this may have caused you. If there is anything additional you need, please advise.

You will also find enclosed our check #147 in the sum of \$25.00, which was previously omitted.

Sincerely,

Donald S. Barnes

DONALD S. BARNES
Operations Manager
DSB:bnp
File:DSB\APDBR12

#7



RECEIVED
MAY 4 1990

Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

May 2, 1990

Mr. H. Merle Myers
Vice President of Production
Chuska Energy Company
315 North Behrend
Farmington, NM 87401


Dear Mr. Myers:

We have received Chuska's application for permit to drill
Black Rock #12.

We have noticed that your office used the first page of the
State of Utah form and the second page of the Arizona form.
The Arizona form is somewhat different than the Utah form
and the form of the oath is different. Therefore, we
have to request that the form only be resubmitted on the
required Arizona form. Enclosed are copies of the Arizona
form.

Also we note that you have not submitted the required filing
fee of \$25.00 with the application. When that is submitted,
we can proceed with issuing the permit. At this time, it
appears that the application is otherwise complete.

Very truly yours,


Daniel J. Brennan
Executive Director

Enclosures



CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

AZ OIL & GAS
CONSERVATION COMMISSION

APR 30 1990

April 26, 1990

State of Arizona
Oil & Gas Conservation Commission
5150 North 16th Street, Suite B141
Phoenix, Arizona 85016

ATTENTION: Daniel J. Brennan

RE: Application for Permit to Drill - Black Rock #12

Dear Mr. Brennan:

Enclosed you will find for your examination and approval the original and two copies of the above-referenced Application for Permit to Drill.

Please advise if you require any additional information concerning this. We will appreciate your prompt consideration.

Sincerely,

H. MERLE MYERS
Vice President of Production

HMM:bnp
Enclosures
File:HMM\BLKROCK.12

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease NOG 8707-1142	Field Black Rock	Reservoir Paradox
Survey or Sec-Twp-Rge Section 7&18-40N-29E	County Apache	State Arizona
Operator Harken Southwest Corporation		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street 5605 N. MacArthur Blvd. Suite	City 400 Irving	State Texas 75038-2617
Above named operator authorizes (name of transporter) Giant Industries		
Transporter's street address 5764 Hwy 64	City Farmington	State New Mexico 87401
Field address		
Oil, condensate, gas well gas, casinghead gas		
To transport 100	% of the Condensate	from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer Western Gas	% transported 100	Product transported Gas
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		
Change of Condensate Purchaser (Black Rock #8 & #12)		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Production Administrator of the Harken Southwest Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date 11-29-95

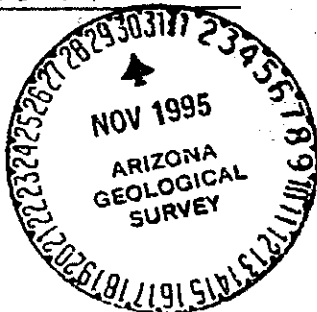
Signature

Date approved: 11-30-95

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: Steven L. Powell

Permit No. 875



STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Operator's Certificate of Compliance & Authorization to Transport Oil or Gas from Lease File Two Copies Form No. 8
--

ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual

Harken Southwest Corporation

Post Office Address (Box or Street Address)

P. O. Drawer 612007, Dallas, TX 75261 -or- 2505 N. Hwy 360, Suite 800, Grand Prairie, TX

Plan of Organization (State whether organization is a corporation, joint stock association, firm or partnership, or individual)

75050

Corporation

Purpose of Organization (State type of business in which engaged)

Oil & Gas Exploration

If a reorganization, give name and address of previous organization.

Changed name from Chuska Energy Company

If a foreign corporation, give
(1) State where incorporated

Nevada

(2) Name and post office address of state agent
Corporation Service Co.
530 South 4th Street
Las Vegas, Nevada 89101

(3) Date of permit to do business in state

1980

Principal Officers or Partners (if partnership)
NAME

Mikel D. Faulkner

Richard Schroeder

Bruce Huff

Larry Cummings

TITLE

Chairman of the Board
Chief Executive Officer
President
Chief Operating Officer
Senior Vice President
Chief Financial Officer
Vice President
General Council

POST OFFICE ADDRESS

P. O. Drawer 612007
Dallas, TX 75261

" "

" "

" "

DIRECTORS NAME

/ All of the above

Don Raymond

P. O. Drawer 612007, Dallas, TX 75261

P. O. Drawer 612007, Dallas, TX 75261

DATE

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Production Administrator of the Harken Southwest Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature Rachelle L. Montgomery

Date 6/24/94

Date



STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Organization Report
File One Copy

Form No. 1

(Black Rock #8 & #12)

OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL OR GAS FROM LEASE		
Federal, State, or Indian Lease Number, or lessor's name if fee lease NOG 8707-1142	Field Black Rock	Reservoir Paradox
Survey or Sec-Twp-Rge Section 7&18-40N-29E	County Apache	State Arizona
Operator RIM Southwest Corporation		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street 5 Inverness Drive East	City Englewood	State Colorado 80112
Above named operator authorizes (name of transporter) Giant Industries		
Transporter's street address 5764 Hwy 64	City Farmington	State New Mexico 87401
Field Address		
Oil, condensate, gas well gas, casinghead gas		
To transport	% of the	from said lease
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
Western Gas	100%	Gas
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. Harken Southwest Corporation changed its name to RIM Southwest Corporation. See attached copy of Articles of Amendment to the Articles of Incorporation.		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I the undersigned, under the penalty of perjury, state that I am the Vice President of the RIM Southwest Corporation (company), and that I am authorized by said company to make this report; that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

1/26/01

Date

Signature Rene Morin, Vice President

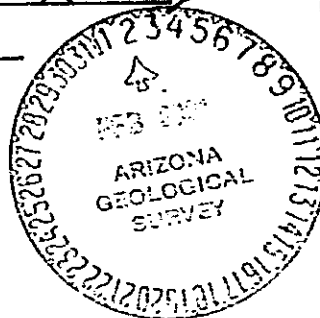
Date approved: 2-5-01

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: Stewart L. Roney

Permit No. 871,875

Mail two copies of completed form to:
Oil & Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315



STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies

Form No. 8

TYPE OR PRINT LEGIBLY
FILE DUPLICATE ORIGINALS
FILING FEE: \$100.00

ARTICLES OF AMENDMENT
TO THE
ARTICLES OF INCORPORATION

3214384

Pursuant to the provisions of Section 53-13-4, NMSA 1978, the undersigned corporation adopts the following Articles of Amendment to its Articles of Incorporation:

ARTICLE ONE: (Note 1) The Corporate name and NMSCC# of the corporation is
Harken Southwest Corporation #3066601 1070720

ARTICLE TWO: (Note 2) The following amendment to the Articles of Incorporation was adopted by the Sole Shareholder of the corporation on December 21, 2000 in the manner prescribed by the New Mexico Business Corporation Act:
(Insert amendment or attach exhibit, if needed - Indication should be given to reflect which article(s) number has been amended.)

ARTICLE ONE is amended and shall read as follows:

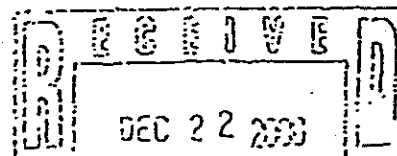
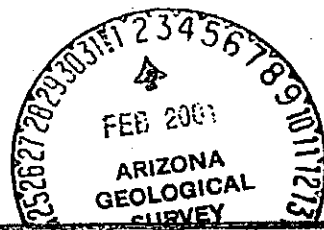
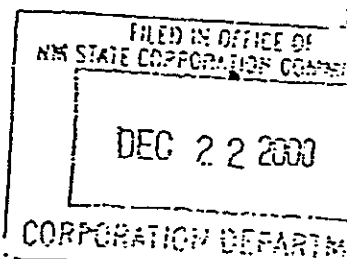
"The name of the corporation is RIM Southwest Corporation."

ARTICLE THREE: (Note 3) The number of shares of the corporation outstanding at the time of such adoption was 20,000 and the number of shares entitled to vote thereon was 20,000.

ARTICLE FOUR: (Note 4) The designation and number of outstanding shares of each class entitled to vote thereon as a class were as follows:

CLASS	NUMBER OF SHARES
One class only of Common Stock	20,000

ARTICLE FIVE: (Note 3) The number of shares voting for such amendment was 20,000 and the number of shares voting against such amendment was 0.



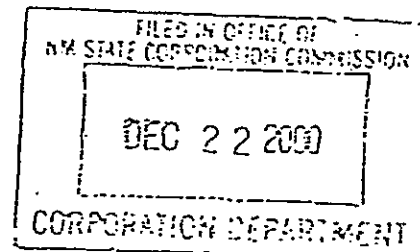
ARTICLE SIX: (Note 3) The number of shares of each class entitled to vote thereon as a class voted for and against such amendment, respectively, is as follows:

CLASS	FOR	AGAINST
Common -- only one class	20,000	0

ARTICLE SEVEN: (Note 4) The manner, if not set forth in such amendment, which any exchange, reclassification, or cancellation of issued shares provided for in the amendment shall be affected, is as follows:

inapplicable

DATED: December 21, 2000



Harken Southwest Corporation

(Note 1) CORPORATE NAME

BY: Stephen W. Rector
(Note 5) Its President
Stephen W. Rector

AND: Rene Marin
(Note 5) Its Vice President
Rene Marin

Under penalty of perjury, the undersigned declares that the foregoing document executed by the corporation and that the statements contained therein are true and correct to the best of my knowledge.

Harken Southwest Corporation

By: Stephen W. Rector
(Note 5) (One of the above officers signs)
Stephen W. Rector, President



RESOLUTION OF THE SOLE SHAREHOLDER
OF
HARKEN SOUTHWEST CORPORATION

A Special Meeting of the sole shareholder of HARKEN SOUTHWEST CORPORATION,
(the "Corporation"), was held beginning at 3:30, Mountain Time, on Thursday December
21, 2000, pursuant to which the sole shareholder consented to, voted in favor of and adopted the
following resolution:

RESOLVED, that the Articles of Incorporation of the Corporation be amended in
the form attached hereto by changing the name of the Corporation as follows:

ARTICLE I

NAME

The name of the corporation is RIM Southwest Corporation.

IN WITNESS WHEREOF, the undersigned has executed this written consent to be
effective as of the 21 day of December 2000.

RIM SW HOLDING CORPORATION, a Colorado
corporation

By: Stephen W. Rector
Name: Stephen W. Rector
Its: President



ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual
RIM SOUTHWEST CORPORATION (FORMERLY KNOWN AS HARKEN SOUTHWEST CORPORATION)

Mailing Address and Phone Number
5 INVERNESS DRIVE EAST, ENGLEWOOD, COLORADO 80112 (303) 799-9828

Plan of Organization (State whether organization is a corporation joint stock association, firm or partnership, or individual)
Corporation

Purpose of Organization (State type of business in which engaged)
Oil & Gas Production/Sales

If a reorganization, give name and address of previous organization
N/A

If a foreign corporation give (1) State where incorporated	(2) Name and mailing address of state agent	(3) Date of permit to do business in state
New Mexico	CT Corporation 322 5 N. Central Avenue Phoenix, AZ 85012	1/16/88
Principal Officers or Partners (if partnership) NAME	TITLE	MAILING ADDRESS
V. A. Isaacs, Jr.	Chairman, Board of Directors	5 Inverness Drive East Englewood, CO 80112
Stephen W. Rector	President	5 Inverness Drive East Englewood, CO 80112
Rene' Morin	Vice President	5 Inverness Drive East Englewood, CO 80112
Robert L. Vesco	Vice President/Secretary/ Treasurer	5 Inverness Drive East Englewood, CO 80112
William J. Holcomb	Vice President	Post Office Box 2058 Farmington, NM 87499

DIRECTORS NAME	MAILING ADDRESS
V. A. Isaacs, Jr.	SAME AS ABOVE
Stephen W. Rector	" "
Rene' Morin	" "
Robert L. Vesco	" "
William J. Holcomb	" "

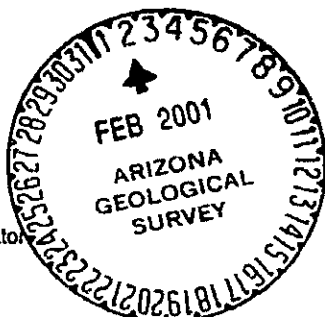
CERTIFICATE I, the undersigned, under the penalty of perjury state that I am the Secretary of the RIM Southwest Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Robert L. Vesco
 Signature Robert L. Vesco, Secretary

1/25/01

Date

Mail completed form to
 Oil and Gas Program Administrator
 Arizona Geological Survey
 416 W Congress., #100
 Tucson, AZ 85701



STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION

Organization Report
 File One Copy

Form No. 1